

KV-27V10/27V15

RM-Y117

RM-Y121/RM-CM101

KV-29V10C/29V10M/32V15

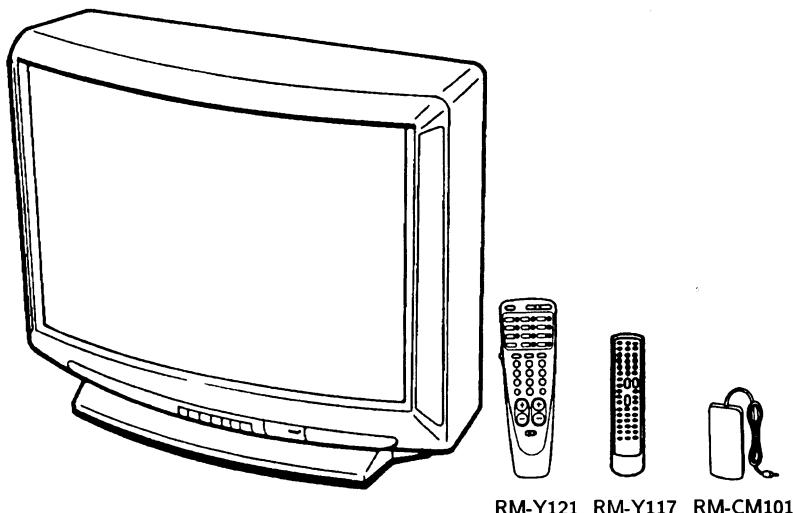
RM-Y117

RM-Y117

RM-Y121

RM-CM101

SERVICE MANUAL



US Model

KV-27V10 Chassis No. SCC-F84Q-A

KV-27V15 Chassis No. SCC-F84R-A

KV-32V15 Chassis No. SCC-F84S-A

Canadian Model

KV-27V10 Chassis No. SCC-F85L-A

KV-27V15 Chassis No. SCC-F85M-A

KV-32V15 Chassis No. SCC-F85N-A

WP Model

KV-29V10C Chassis No. SCC-G49A-A

E Model

KV-29V10M Chassis No. SCC-F89H-A

AA-1 CHASSIS

MODELS OF THE SAME SERIES	
KV-27V10/27V15	KV-27S10/27S15/29RS10
KV-29V10C/29V10M/32V15	KV-29RS15/32S10/32S15
KV-27V55/29V55M	KV-2970RS/2970M/2975M

SPECIFICATIONS

Television system
Channel coverage

American TV standards
VHF: 2-13
UHF: 14-69
CABLE TV: 1-125
Hi-Black™ Trinitron® tube
(KV-27V10/27V15/29V10C/29V10M)
27-inch picture measured diagonally
29-inch picture measured diagonally
(KV-32V15)
32-inch picture measured diagonally

Antenna 75-ohm external antenna terminal for VHF/UHF

Picture tube

- Continued on next page -



MICROFILM

TRINITRON® COLOR TV
SONY®

Input	VIDEO and S VIDEO S VIDEO IN Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal), 75-ohms Video : 1 Vp-p, 75-ohms unbalanced, sync negative Audio : 500 mVrms (100% modulation) Impedance: 47 kilo-ohms
Output	AUDIO OUT : More than 408 mVrms at the maximum volume setting (variable) More than 408 mVrms (fix) Impedances : 5 kilo-ohms (KV-27S15/29RS15/32S15)
Speaker output	5W×2
Power requirements	120 V AC, 60Hz
Power consumption	

Model number	When in use	In standby mode
KV-27V10	165 W	6 W
KV-27V15	170 W	6.5 W
KV-29V10C	160 W	9 W
KV-29V10M	165 W	6 W
KV-32V15	205 W	6.5 W

Dimensions/Weight

	Dimensions (w/h/d)	Weight
KV-27V10	664×572×513 mm (26 1/4×23 5/8×20 1/4 inches)	42.9 kg (94 lbs)
KV-27V15	664×572×513 mm (26 1/4×23 5/8×20 1/4 inches)	43 kg (94 lbs 13 oz)
KV-29V10C	664×572×513 mm (26 1/4×23 5/8×20 1/4 inches)	42.9 kg (94 lbs)
KV-29V10M	664×572×513 mm (26 1/4×23 5/8×20 1/4 inches)	42.9 kg (94 lbs)
KV-32V15	801×664×603 mm (31 5/8×26 1/4×23 3/4 inches)	70 kg (154 lbs 2 oz)

Supplied accessories (KV-27V10/29V10C/29V10M)
Remote Commander RM-Y117 (1)
with 2 size AA (R6) batteries
(KV-27V15/32V15)
Remote Commander RM-Y121 (1)
with 1 size AA (R6) battery
RM-CM101

Optional accessories U/V mixer EAC-66
Connecting cable
VMC-810S/820S, VMC-720M,
YC-15V/30V, RK-74A

Design and specifications are subject to change without notice.

(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK Δ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L ANODE, COURTCIRCUITER L ANODE DU TUBE CATHODIQUE ET CELUI DE L ANODE DU CAP AU CHASSIS METALLIQUE DE L APPAREIL, OU AU COUCHE DE CARBONE PEINT SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D ELECTROCUTION PROVENANT D'UN CHASSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DEPANNAGE.

LE CHASSIS DE CE RECEPTEUR EST DIRECTEMENT RACCORDÉ A L ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MAPQUE Δ SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRESENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTE.

SAFETY CHECK-OUT

(US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

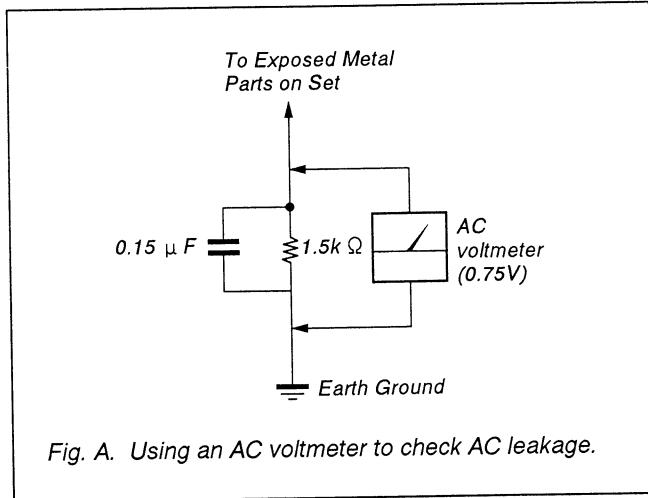


Fig. A. Using an AC voltmeter to check AC leakage.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

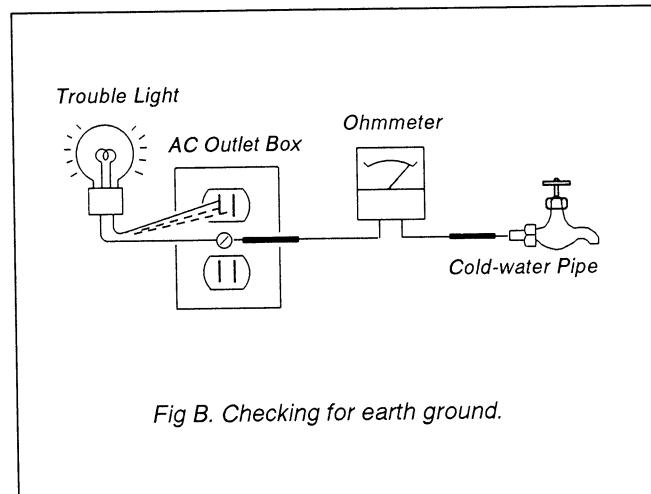


Fig. B. Checking for earth ground.

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• KV-27V10/29V10C/29V10M
Step 1: Hookup

**SECTION 1
 GENERAL**

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

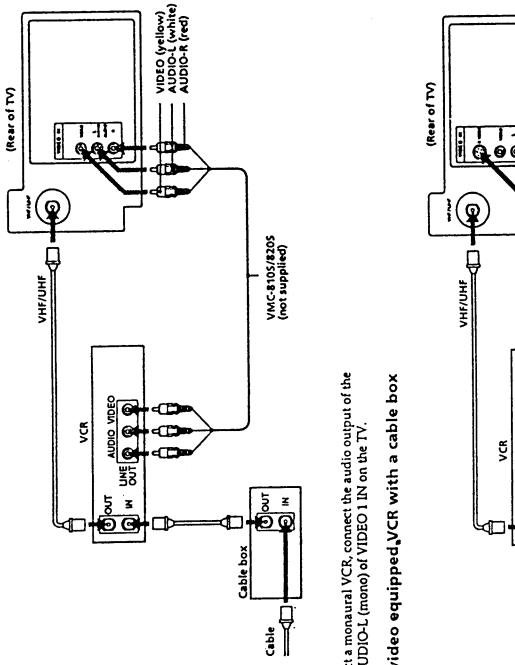
Connecting an antenna/cable TV system with a VCR

To connect your VCR to the TV, first check the model number of your TV and select the corresponding connection. For details on connection, see the instruction manual of your VCR. Before making connection, disconnect the AC power cords of the equipment to be connected.

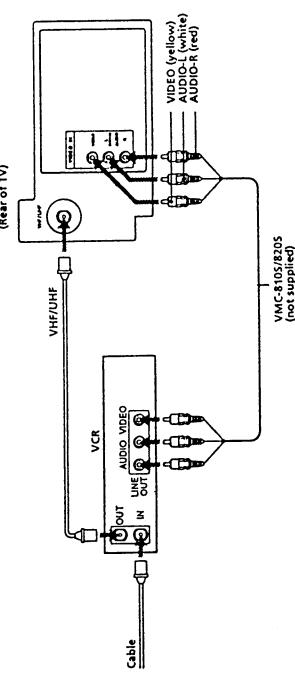
After making these connections, you will be able to do the following:

- View the playback of video tapes
- Record one TV program while viewing another program

Without a cable box



Without a cable box



■ KV-27V10/29V10C/29V10M/32510 only
 If your VCR has an S-video output jack, hook up as follows and then set S-VIDEO to ON on your TV (page 12). (It is set to ON at the factory.)

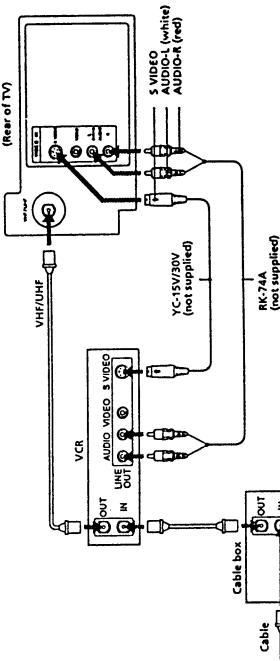
• To connect a monaural VCR, connect the audio output of the VCR to AUDIO-L (mono) of VIDEO IN on the TV.

To an S video equipped VCR without a cable box

■ KV-27V10/29V10C/29V10M/32510 only

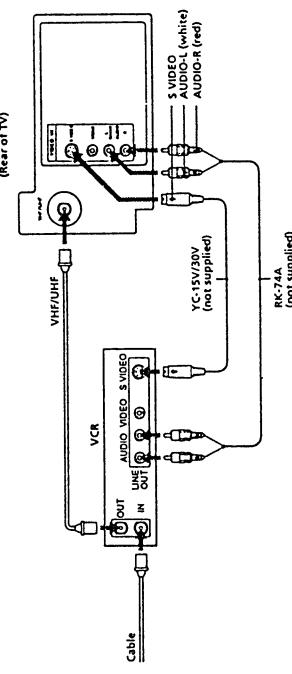
If your VCR has an S-video output jack, hook up as follows and then set S-VIDEO to ON on your TV (page 12). (It is set to ON at the factory.)

With a cable box



Note

- Video signals are composed of Y (luminance) and C (chroma) signals. The S connection sends the two signals separately preventing degradation, and gives better picture quality compared to conventional connection.



Note
• If more than 90 seconds elapse after you press a button, the menu disappears automatically.

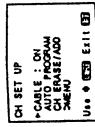
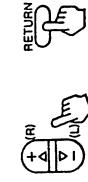
DEMO: To browse the main functions. Press VOL- in step 3. The functions and menus are displayed one by one.

FACTORY RESET: To restore the factory settings when you are confused about the TV settings. Press CH- in step 3. The settings of picture and sound are restored to the factory setting.

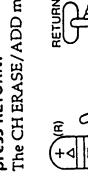
Erasing or adding channels

After AUTO SET UP you can erase unnecessary channels or add the channels you want. Preset channels during the day rather than late at night, when some channels may not be broadcasting.

3 Press $\Delta+$ or $\nabla-$ to select CH SET UP and press RETURN. The CH SET UP menu appears.



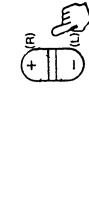
4 Press $\Delta+$ or $\nabla-$ to select CH ERASE/ADD and press RETURN. The CH ERASE/ADD menu appears.



4 Press $\Delta+$ or $\nabla-$ to select CH ERASE/ADD and press RETURN. The CH ERASE/ADD menu appears.

5 Erase and/or add the channel you want:
To erase an unwanted channel/
(1) Make sure the cursor (•) is beside ERASE.
(2) Press CH-/+ to select the channel you want to erase and,

Selected channel number
want to add and,
Selected channel number
want to add and,



(3) press RETURN.
The indication “-” appears beside the channel number, showing that the channel is erased from the preset memory.



To add a channel that you want:
(1) Press $\Delta+$ or $\nabla-$ to select ADD.
(2) Press the 0-9 buttons to select the channel you want to add and press ENTER and,

Selected channel number
want to add and,



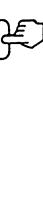
(3) press RETURN.
The indication “+” appears beside the channel number, showing that the channel is added to the preset memory.



6 To erase and/or add other channels, repeat step 5.



7 When you finish, press MENU.



Note
• If you erase or add a VHF or UHF channel, the cable TV channel with the same number is also erased or added, and vice versa.

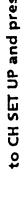
Setting cable TV on or off

If you have connected the TV to a cable TV system, set CABLE to ON, the factory setting. If not, set CABLE to OFF. You do not have to do this procedure if you execute AUTO SET UP (page 9). Do this procedure only when you want to set it manually.

1 Press MENU.



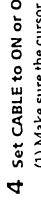
2 Press $\Delta+$ or $\nabla-$ to move the cursor (•) to SET UP and press RETURN.



3 Press $\Delta+$ or $\nabla-$ to move the cursor (•) to CH SET UP and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to move the cursor (•) to AUTO PROGRAM and press RETURN.



Note
• “AUTO PROGRAM” appears on the screen and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, “AUTO PROGRAM” disappears and the lowest numbered channel is displayed.

5 Press MENU to return to the original screen.



Note
• If the CH SET UP menu appears in black, the TV is set to video input and you cannot select AUTO PROGRAM. Press TV/VIDEO or TV so that a channel number appears.

5 Press MENU to return to the original screen.

Note
• If CH SET UP menu appears in black, the TV is set to video input, and you cannot select AUTO PROGRAM.

Presetting channels

You can preset TV channels easily by AUTO PROGRAM feature. You do not have to do this procedure if you execute AUTO SET UP (page 9). Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press $\Delta+$ or $\nabla-$ to move the cursor (•) to SET UP and press RETURN.

3 Press $\Delta+$ or $\nabla-$ to move the cursor (•) to CH SET UP and press RETURN.

4 Press $\Delta+$ or $\nabla-$ to move the cursor (•) to AUTO PROGRAM and press RETURN.

Note
• “AUTO PROGRAM” appears on the screen and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, “AUTO PROGRAM” disappears and the lowest numbered channel is displayed.

5 Press MENU to return to the original screen.

Note
• If the CH SET UP menu appears in black, the TV is set to video input and you cannot select AUTO PROGRAM. Press TV/VIDEO or TV so that a channel number appears.

Operations

Changing the menu language

Setting S VIDEO on or off

■ KV-27V10/29V10/29V10M/32S5/10 only

You can change the S VIDEO menu to ON or OFF.

1 Press TV/VIDEO select VIDEO 1.

2 Press MENU.

3 Press $\Delta+$ or $\nabla-$ to move the cursor (\blacktriangleright) to SET UP and press RETURN.

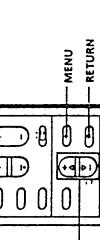
4 Press $\Delta+$ or $\nabla-$ to move the cursor (\blacktriangleright) to SET S VIDEO and press RETURN.

5 Press $\Delta+$ or $\nabla-$ to select ON or OFF and press RETURN.

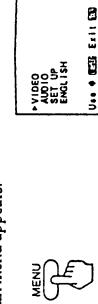
6 Press MENU to return to the original screen.

Note
• If S VIDEO appears in black, set a video input to VIDEO 1.

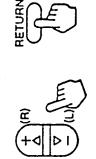
• If you set S VIDEO to ON, the TV automatically receives S video signals whenever a VCR with S Video is connected.



1 Press MENU.
The main menu appears.



2 Press $\Delta+$ or $\nabla-$ to move the cursor (\blacktriangleright) to ENGLISH and press RETURN.



3 Press $\Delta+$ or $\nabla-$ to select ESPAÑOL and press RETURN.



4 Press MENU to return to the original screen.

Note
• Certain parts of the ESPAÑOL menus remain in English.

Watching the TV

Switching quickly between two channels

Press JUMP.

The channel you watched previously appears.



Pressing JUMP again switches back the channel.

Muting the sound

Press MUTING.
"MUTING" appears on the screen.



To restore the sound, press MUTING again, or press VOL +.

Displaying on-screen information

Use this feature to check the channel number, channel caption (if set), and MTS mode (if SAP is selected). Press DISPLAY.



1 Press POWER to turn the TV on.



If "VIDEO" appears on the screen, press the TV/VIDEO button so that a channel number appears.

2 Select the channel you want:

To select a channel directly
Press the 0 - 9 buttons and then press ENTER.



The TV stays on for the length of time you specify and then shuts off automatically.
Press SLEEP repeatedly until the time (minutes) you want appears.



Each time you press SLEEP, the time changes as follows: 30 → 60 → 90 → OFF.



To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP OFF" appears, or turn the TV off.

1 Press VOL +/- to adjust the volume.



Note
• Set the CABLE BOX/TV selector to TV.

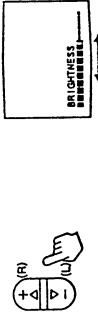
(KV-27V10/29V10/29V10M only)

Operations

12 | Getting Started

Adjusting the picture (VIDEO)

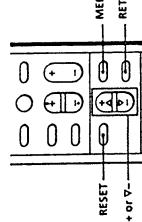
4 Adjust the selected item:



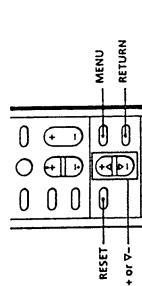
(1) Press $\Delta+$ or $\nabla-$ to adjust the item and,

(2) press RETURN.

When watching TV programs, you can adjust the quality of the picture to suit your taste. You can adjust the picture of video input(s) as well. These settings are stored separately from those for the TV picture.



1 Press MENU.



2 Make sure the cursor (\blacktriangleright) is beside VIDEO and press RETURN.



3 Select the item you want to adjust.



For example:

(1) To adjust brightness, press $\Delta+$ or $\nabla-$ to select



BRIGHT and,



(2) press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select ON or OFF and press RETURN.



To restore the factory settings



Press RESET while the VIDEO menu is displayed.



All the settings are restored to the factory settings.



For example:

(1) To adjust brightness, press $\Delta+$ or $\nabla-$ to select



BRIGHT and,

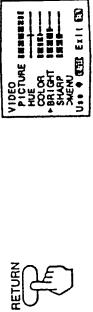


(2) press RETURN.



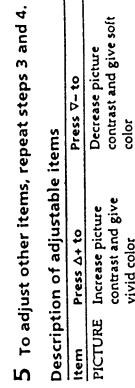
Adjusting screen brightness automatically (LUMISPONDER)

The new setting appears in the VIDEO menu.

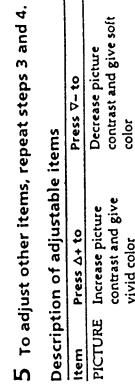


(2) Press RETURN.

For details on each item, see "Description of adjustable items" below.



5 To adjust other items, repeat steps 3 and 4.



Description of adjustable items

Press $\Delta+$ to

PICTURE Increase picture contrast and give

color.

HUE Make skin tones become reddish

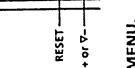
COLOR Increase color intensity

BRIGHT Brighten the picture

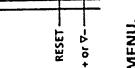
SHARP Sharpen the picture

For example:

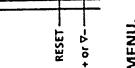
(1) To adjust brightness, press $\Delta+$ or $\nabla-$ to select



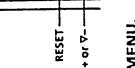
BRIGHT and,



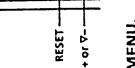
(2) press RETURN.



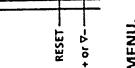
6 To restore the factory settings



Press RESET while the VIDEO menu is displayed.

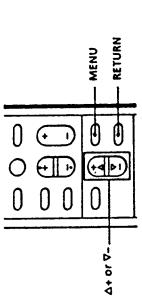


All the settings are restored to the factory settings.



Adjusting the sound (AUDIO)

You can adjust the quality of the sound to suit your taste. You can adjust the sound of video input(s) as well. These settings are stored separately from those for the TV sound.



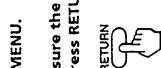
1 Press MENU.

2 Press $\Delta+$ or $\nabla-$ to select AUDIO and press RETURN.

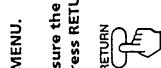
3 Select the item you want to adjust.

For example:

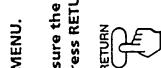
(1) To adjust bass, press $\Delta+$ or $\nabla-$ to select BASS and,



(2) press RETURN.

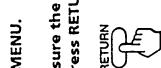


4 Press $\Delta+$ or $\nabla-$ to select ON or OFF and press RETURN.

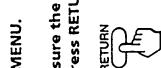


5 To adjust other items, repeat steps 3 and 4.

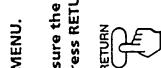
6 To restore the factory settings



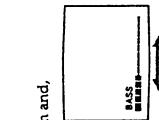
Press RESET while the AUDIO menu is displayed.



All the settings are restored to the factory settings.

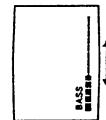


Listening to surround sound (SURROUND)



4 Adjust the selected item:

(1) Press $\Delta+$ or $\nabla-$ to adjust the item and.



(2) Press RETURN.



The new setting appears in the AUDIO menu.



■ KV-27V10/29V10/29V10M only

SURROUND feature simulate sound reproduction with the atmosphere of a movie theater or a concert hall. Surround sound is only effective for stereo programs.

For details on each item, see "Description of adjustable items" below.

5 To adjust other items, repeat steps 3 and 4 above.

Description of adjustable items

Item	Press $\Delta+$ to	Press $\nabla-$ to
TREBLE	Increase the treble response	Decrease the treble response
BASS	Increase the bass response	Decrease the bass response
BALANCE	Emphasize the right speaker's volume	Emphasize the left speaker's volume

To restore the factory settings
PRESS RESET while the AUDIO menu is displayed.

Note

- When SPEAKER (page 17) is OFF and AUDIO OUT (page 18) is FIXED condition, sound menu appears mid-level setting and it cannot be adjusted.

4 Press $\Delta+$ or $\nabla-$ to select ON and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select SURROUND and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SURROUND and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select ON and press RETURN.



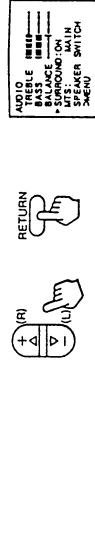
4 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



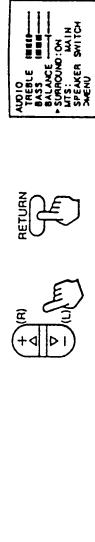
5 Press $\Delta+$ or $\nabla-$ to select MONO and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select MONO and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MONO and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select MONO and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



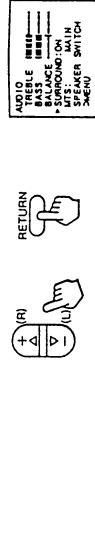
4 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



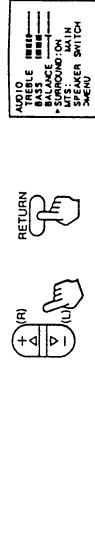
5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



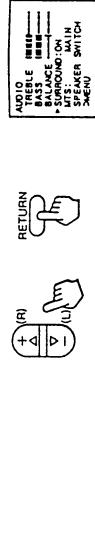
5 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



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5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



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4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



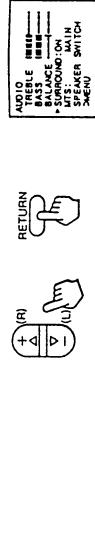
5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



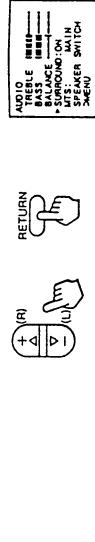
4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



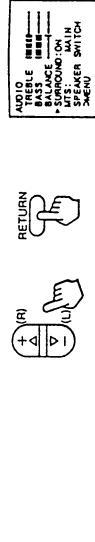
5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



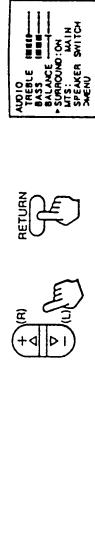
4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



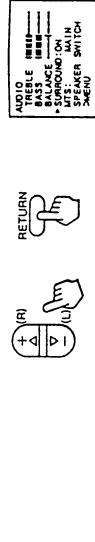
5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



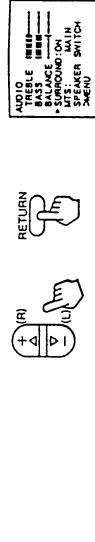
5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



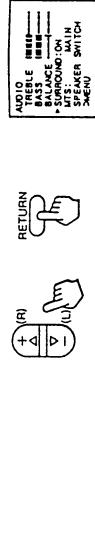
4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



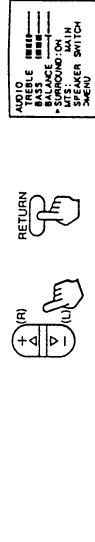
5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



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4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.



4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



5 Press $\Delta+$ or $\nabla-$ to select MAIN and press RETURN.

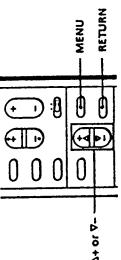


4 Press $\Delta+$ or $\nabla-$ to select SAP and press RETURN.



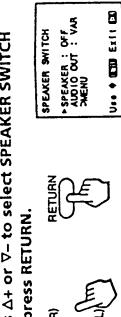
Setting audio out (AUDIO OUT)

■ KV-27V10/29V10/29V10M only
You can select audio out to variable or fixed when
SPEAKER is set to OFF.
Audio out is variable when SPEAKER is set to ON.

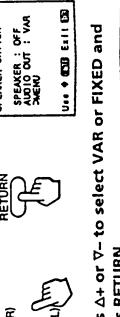


1 Press MENU.

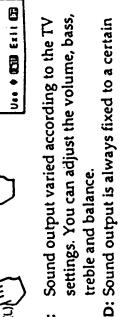
2 Press Δ or ∇ to select SPEAKER SWITCH
and press RETURN.



3 Press Δ or ∇ to select AUDIO OUT and
press RETURN.



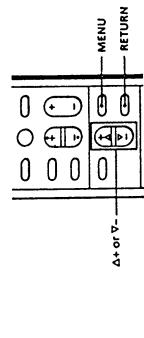
4 Press Δ or ∇ to select VAR or FIXED and
press RETURN.



VAR: Sound output varied according to the TV
settings. You can adjust the volume, bass,
treble and balance.
FIXED: Sound output is always fixed to a certain
level.
You cannot adjust the volume.

Customizing the channel number buttons (CH CAPTION) GUIDE

You can choose up to 12 channels, caption each
channel, and assign a specific channel number button
to each channel. This feature allows you to select your
favorite channels easily by name. For example, you can
name channel 20 "ESPN," and assign the channel
number 4 button to it.



1 Press Δ or ∇ to select CH CAPTION/GUIDE
and press RETURN.

2 Press MENU.

3 Press Δ or ∇ to select SET UP and press
RETURN.

4 Press Δ or ∇ to select CH CAPTION/GUIDE
and press RETURN.

5 Press RETURN again.

9 Repeat step 5 to 7 to caption other channels.

To erase a caption
Press RESET after step 5.

Notes

- The position number you already selected appears in yellow.
- In the CH CAPTION/GUIDE menu a period in black, the TV is set to a video input and you cannot select CH CAPTION/GUIDE.
- Press TV/VIDEO to select TV mode.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.

6 Press Δ or ∇ to select a channel guide
number button and press RETURN.

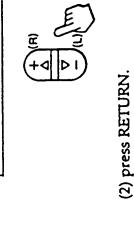
Each time you press Δ or ∇ , the channel numbers
change to read in turns. The channel number button
you select will be the one you press to call up your
favorite channel.



7 Press Δ or ∇ to select the channel that
you want to caption and press RETURN.



8 Enter the letters (up to four) to caption the
channel:
(1) Press Δ or ∇ to select the first letter.
Each time you press Δ or ∇ , the letter changes
as shown below and,
0→1→2→3→A→4→5→6→7→8→9→/→(Blank space)



(2) Press RETURN.



(3) Repeat steps (1) and (2) to select the remaining
letters and press RETURN.



1 Press CH GUIDE.

The CHANNEL GUIDE menu appears showing
channel captions and the corresponding channel
number buttons.

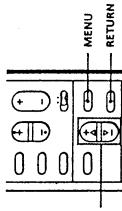
Operations | 19

Setting video labels (VIDEO LABEL)



■ KV-27V10/29V10/29V10M only

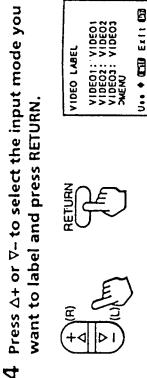
This feature allows you to label each input mode so that you can easily identify the connected equipment. For example, you can label VIDEO 1 IN as VHS.



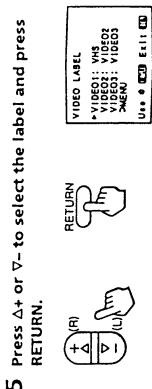
1 Press MENU.

2 Press Δ+ or ∇- to select SET UP and press RETURN.

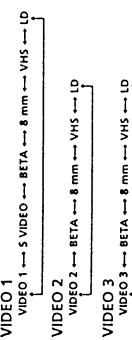
3 Press Δ+ or ∇- to select VIDEO LABEL and press RETURN.



Displaying Caption Vision (CAPTION VISION)



■ KV-27V10/27V10/25V10 only



VIDEO 1 —> VHS —> BETA —> 8 mm —> VHS —> LD

VIDEO 2 —> BETA —> 8 mm —> VHS —> LD

VIDEO 3 —> BETA —> 8 mm —> VHS —> LD

6 Repeat steps 4 and 5 to label other input modes.

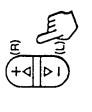
Note

- If more than 90 seconds elapse after you press a button, the menu disappears automatically.

2 Press Δ+ or ∇- to select CAPTION VISION and press RETURN.



3 Press Δ+ or ∇- to select the caption type and press RETURN.



Note

- Captions may appear with a white box or another error instead of a certain word. Poor reception of TV programs can also cause errors in Caption Vision.

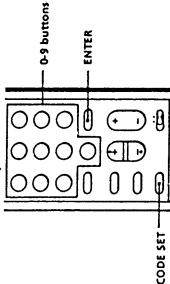
Operating video equipment



■ KV-27V10/29V10/29V10M only

You can operate video equipment that has an infrared remote sensor with the supplied remote commander. For the operations, set the manufacturer's code number.

Setting the manufacturer's code



While pressing CODE SET, press 0-9 to enter the manufacturer's code number (see the chart on the next page). For example, to operate a Sony 8 mm VCR, press 0, 2 and ENTER.



The code numbers for Sony equipment are assigned as follows:

01	.....Beta, ED Beta VCR
02	.....8 mm VCR
03	.....VHS VCR (Factory setting)
04	.....MDP

Step 1: Hookup

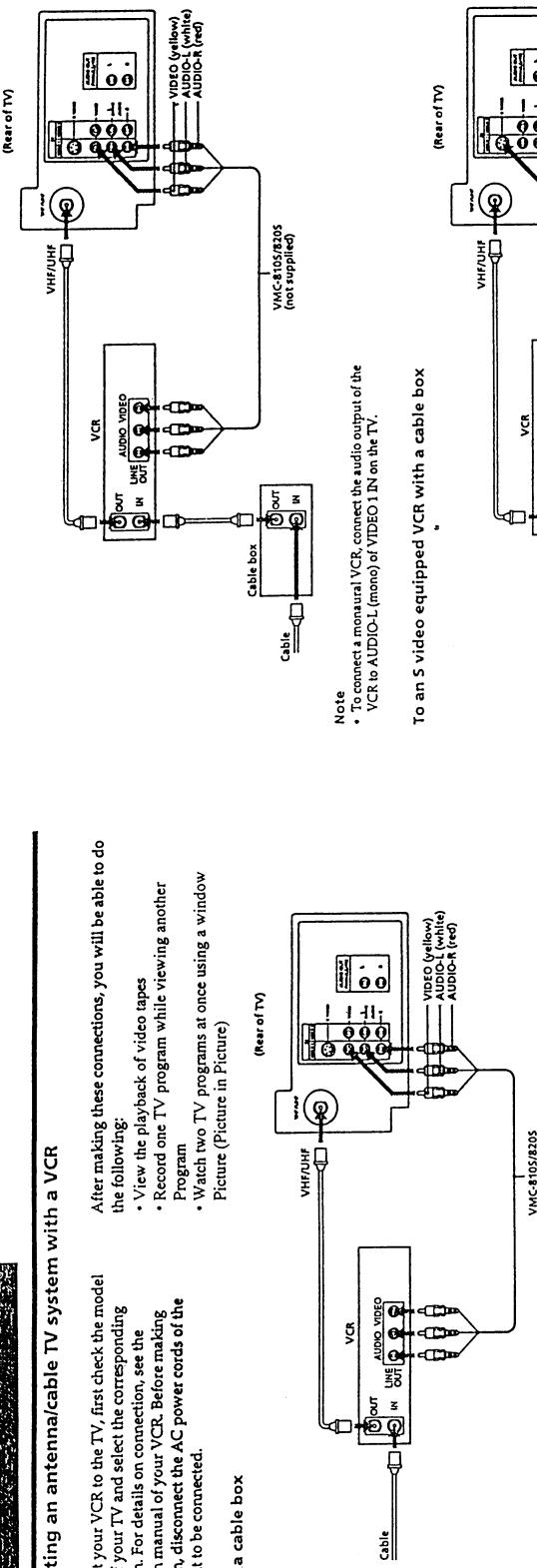
Connecting an antennicable TV system with a VCR

To connect your VCR to the TV, first check the model number of your TV and select the corresponding connection. For details on connection, see the instruction manual of your VCR. Before making connection, disconnect the AC power cords of the equipment to be connected.

After making these connections, you will be able to do the following:

- View the playback of video tapes
- Record one TV program while viewing another Program
- Watch two TV programs at once using a window Picture (Picture in Picture)

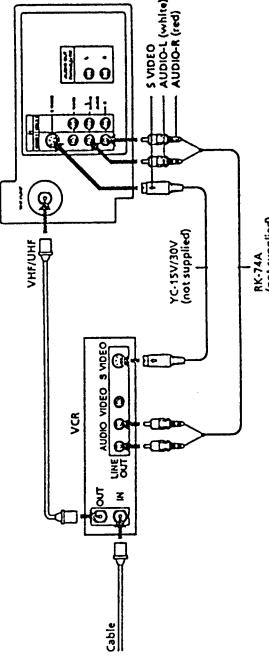
Without a cable box



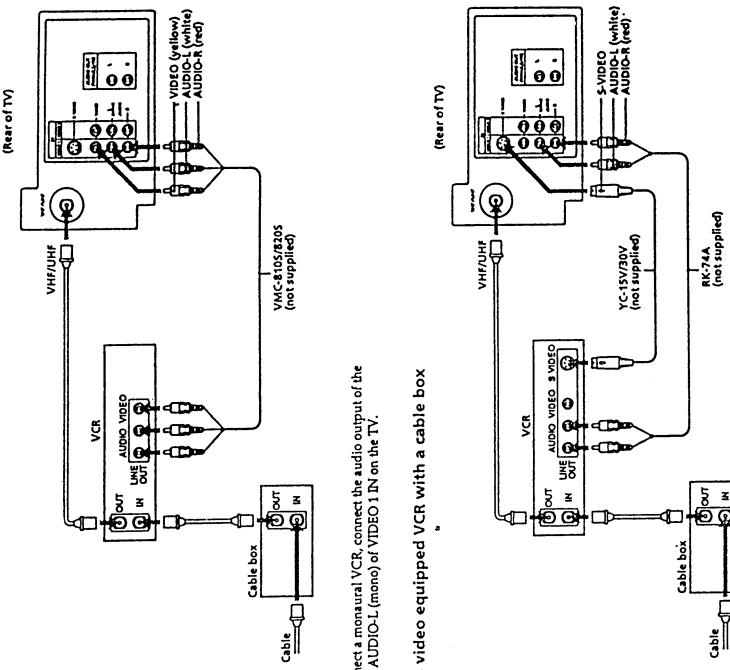
To an S video equipped VCR without a cable box
If your VCR has an S video output jack, hook up as follows and then set S VIDEO to ON on your TV (page 12). It is set to ON at the factory.

Note
To connect a monaural VCR, connect the audio output of the VCR to AUDIO-L (mono) of VIDEO 1 IN on the TV.

If your VCR has an S video output jack, hook up as follows and then set S VIDEO to ON on your TV (page 12). It is set to ON at the factory.



With a cable box



To an S video equipped VCR with a cable box
If your VCR has an S video output jack, hook up as follows and then set S VIDEO to ON on your TV (page 12). It is set to ON at the factory.

Note
Video signals are composed of Y (luminance) and C (chroma) signals. The connection sends the two signals separately preventing degradation, and gives better picture quality compared to conventional connection.

Step 3: Setting up the TV automatically (AUTO SET UP)

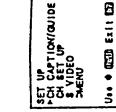


3 Press CH +.



2 Press + or - to move the cursor (>) to SET UP and press RETURN.

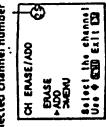
The SET UP menu appears.



To add a channel that you want

(1) Press + or - to move the cursor (>) to ADD.

(2) Press the 0-9 buttons to select the channel you want to add and press ENTER and,



Selected channel number

CH ERASE/ADD

CH

ERASE

ADD

SEARCH

SET UP THE CHANNEL

ERASE

SEARCH

Setting cable TV on or off

For cable box control (Cable Mouse) Users
(KV-22V15/22V5 only)
Refer to the "Cable Mouse" manual.
How to Set Cable TV

If CABLE is set to ON, the factory setting. If not, set CABLE to OFF.
You do not have to do this procedure if you execute AUTO SET UP (page 10). Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press + or - to move the cursor (>) to SET UP and press RETURN.

3 Press + or - to move the cursor (>) to CH SET UP and press RETURN.

4 Set CABLE to ON or OFF:

(1) Make sure the cursor (>) is beside CABLE and press RETURN.

If the cursor is not beside CABLE, press + or - to move the cursor and press RETURN.

(2) Press + or - to select ON or OFF and, press RETURN.

"AUTO PROGRAM" appears on the screen and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the lowest numbered channel is displayed.

5 Press MENU to return to the original screen.

Note
• If CH SET UP appears in black, the TV is set to a video input and you cannot select AUTO PROGRAM. Press TV/VIDEO or TV so that a channel number appears.

Presetting channels

Setting S video on or off

You can change the S VIDEO menu to ON or OFF.

1 Press TV/VIDEO to select VIDEO 1.

2 Press MENU.

3 Press + or - to move the cursor (>) to SET UP and press RETURN.

4 Press + or - to move the cursor (>) to S VIDEO and press RETURN.

5 Press + or - to select ON or OFF and press RETURN.

6 Press MENU to return to the original screen.

Notes
• If S VIDEO appears in black, set a video input to VIDEO 1.

• If you set S VIDEO to ON, the TV automatically receives video signals whenever a VCR with S Video is connected.

1 Press MENU.

The main menu appears.

2 Press + or - to move the cursor (>) to ENGLISH and press RETURN.

3 Press + or - to select ESPANOL and press RETURN.

4 Press MENU to return to the original screen.

Note
• Certain parts of the ESPANOL menus remain in English.

Watching the TV



3 Press VOL +/- to adjust the volume.

Note • Set the CABLE BOX/TV selector to TV.

Switching quickly between two channels

Press JUMP. The channel you watched previously appears.



Pressing JUMP again switches back the channel.



Muting the sound

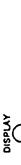


Press MUTING. "MUTING" appears on the screen.

To restore the sound, Press MUTING again, or press VOL +.

Displaying on-screen information

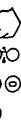
Use this feature to check the channel number, channel caption (if set), and MTS mode (if SAP is selected). Press DISPLAY.



If "VIDEO" appears on the screen, press the TV / VIDEO or TV button so that a channel number appears.

2 Select the channel you want:

To select a channel directly
Press the 0-9 buttons and then press ENTER.



The channel can also be selected without pressing ENTER.
To scan through channels
Press CH +/- until the channel you want appears.



To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP OFF" appears, or turn the TV off.



Watching two programs at a time —PIP

Changing the window picture input mode
Press TV/VIDEO in the PIP control area to select the input mode.
Each time you press TV/VIDEO, "TV", "VIDEO 1", "VIDEO 2" and "VIDEO 3 (except for KV-27515/29515)" appear in sequence.

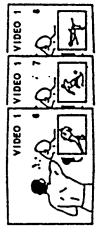


A window picture will appear in the same input mode as the last time you used PIP.

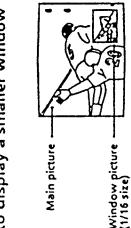
Listening to the sound of the window picture
Press AUDIO. The h display appears for a few seconds, indicating that the window picture sound is being received.



Changing TV channels in the window picture
Press CH +/- in the PIP control area.



To restore the main picture sound, press AUDIO again.



Changing TV channels in the window picture
Press CH +/- in the PIP control area.

To remove the window picture, press PIP again.

Notes

- If the main picture is not receiving an image, the window picture may be in black and white.
- The window picture may be affected by the condition of the main picture.
- The window picture sound is also output from the VARIABLE/FIX AUDIO OUT jacks when you listen to it.

Adjusting the picture (VIDEO)

Changing the position of the window picture

Press POSITION.

Each time you press POSITION, the window picture will move counterclockwise on the screen.



Freezing the window picture

This feature is useful when you want to write down a recipe from a cooking program, a displayed address or a phone number and so on.

Press FREEZE.



Restoring the normal screen, press FREEZE again.

Swapping the main and window pictures

Press SWAP.

Each time you press SWAP, the images from the main and window pictures switch places along with the sound.



Note
• The channels being received through the AUX jack cannot be displayed as a window picture (KV-31V15 only).

Adjusting screen brightness automatically (LUMISPONDER)

4 Adjust the selected item:

(1) Press + or - to adjust the item and,



(2) Press RETURN.

The new setting appears in the VIDEO menu.



For details on each item, see "Description of adjustable items" below.

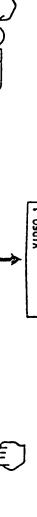
5 To adjust other items, repeat steps 3 and 4.

Description of adjustable items

Item	Press + & to	Press - & to
PICTURE	Increase picture contrast and give soft color	Decrease picture contrast and give soft color
HUE	Make skin tones become purplish	Make skin tones become greenish
COLOR	Increase color intensity	Decrease color intensity
BRIGHT	Brighten the picture	Darken the picture
SHARP	Sharpen the picture	Soften the picture

3 Select the item you want to adjust.

For example:
(1) To adjust brightness, press + or - to select BRIGHT and,

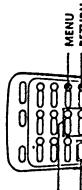


Note
• The channels being received through the AUX jack cannot be displayed as a window picture (KV-31V15 only).

Adjusting screen brightness automatically (LUMISPONDER)

■ KV-27V15/32V15 only

The LUMISPONDER feature adjusts the brightness of the screen automatically according to the ambient brightness. The LUMISPONDER function automatically adjusts the level set by the user in the VIDEO menu to the standard.

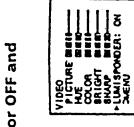


■ KV-27V15/32V15 only

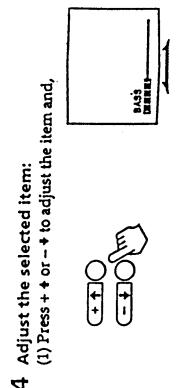
The LUMISPONDER feature adjusts the brightness of the screen automatically according to the ambient brightness. The LUMISPONDER function automatically adjusts the level set by the user in the VIDEO menu to the standard.



■ KV-27V15/32V15 only

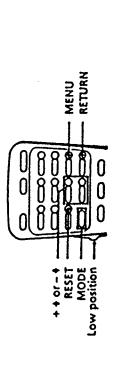


Adjusting the sound (AUDIO)

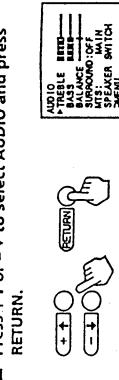


4 Adjust the selected item:
(1) Press + or - to adjust the item and,
MAIN

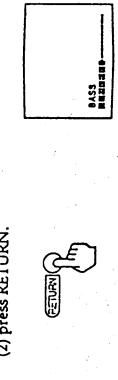
You can adjust the quality of the TV sound to suit your taste. You can adjust the sound of video inputs as well. These settings are stored separately from those for the TV sound.



1 Press MENU.
2 Press + or - to select AUDIO and press RETURN.



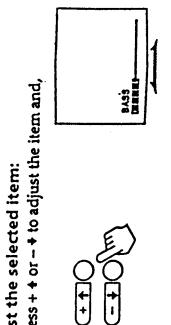
3 Select the item you want to adjust.
For example:
(1) To adjust bass, press + or - to select BASS and,



(2) Press RETURN.

19

Listening to surround sound (SURROUND)

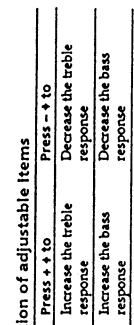


4 Adjust the selected item:
(1) Press + or - to adjust the item and,
MAIN

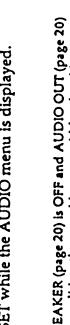
(2) Press RETURN.
The new setting appears in the AUDIO menu.



5 To adjust other items, repeat steps 3 and 4 above.



To restore the factory settings
Press RESET while the AUDIO menu is displayed.



Note
• When SPEAKER (page 20) is OFF and AUDIO OUT (page 20) is FIXED condition, the sound is set to mid-level and it cannot be adjusted.



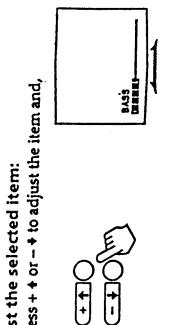
MAIN Listen to stereo sound.
The STEREO Indicator on the TV lights up
while a stereo broadcast is received.

SAP Listen to bilingual programs.

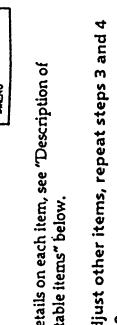
The sound of non-SAP programs will be muted when SAP is selected.

MONO Reduce noise during stereo broadcasts.

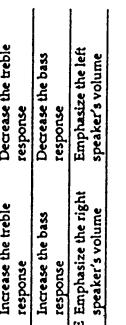
Selecting stereo or bilingual programs (MTS)



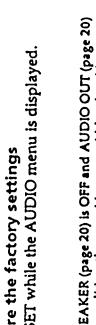
The Multichannel TV Sound (MTS) feature allows you to enjoy stereo sound or Second Audio Programs (SAP) at your choice. The initial setting is stereo sound (MAIN).



1 Press MENU.
2 Press + or - to select AUDIO and press RETURN.



3 Press + or - to select SURROUND and press RETURN.



4 Press + or - to select MAIN, SAP, or MONO and press RETURN.



MAIN Listen to stereo sound.
The STEREO Indicator on the TV lights up
while a stereo broadcast is received.

SAP Listen to bilingual programs.

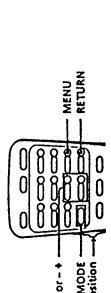
The sound of non-SAP programs will be muted when SAP is selected.

MONO Reduce noise during stereo broadcasts.

Note
• Stereo and SAP sounds are subject to program sources.

Setting the speaker switch (SPEAKER)

You may switch off the TV speakers when, for example, you want to listen to the sound through a stereo system.



1 Press MENU.

2 Press + or - to select AUDIO OUT and press RETURN.

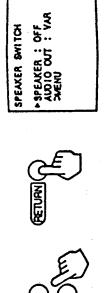
3 Press + or - to select SPEAKER SWITCH and press RETURN.



4 Make sure the cursor (>) is beside SPEAKER and press RETURN.



5 Press + or - to select ON or OFF and press RETURN.



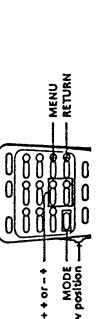
VAR: Sound output varied according to the TV settings. You can adjust the volume, bass, treble and balance.

FIXED: Sound output is always fixed to a certain level. You cannot adjust the volume.

Setting audio out (AUDIO OUT)

You can select audio out to variable or fixed when SPEAKER is set to OFF.

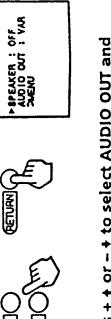
Audio out is variable when SPEAKER is set to ON.



1 Press MENU.

2 Press + or - to select AUDIO OUT and press RETURN.

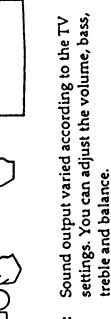
3 Press + or - to select SPEAKER SWITCH and press RETURN.



4 Press + or - to select AUDIO OUT and press RETURN.



5 Press + or - to select VAR or FIXED and press RETURN.



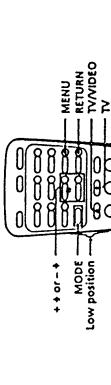
Customizing the channel number buttons (CH CAPTION/GUIDE)

For cable box control (Cable Mouse) users (KV-27V5/B2V15 only):

May the setting of channel number buttons be customized by name? For example, you can assign the channel number buttons to captioning.

You can choose up to 12 channels, caption each channel and assign a specific channel number button to each channel. This feature allows you to select your favorite channels easily by name. For example, you can name channel 20 "ESPN," and assign the channel number 4 button to it.

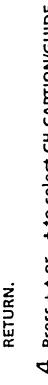
Setting captions to favorite channels



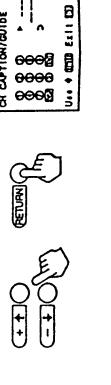
1 Press TV/VIDEO or TV to select TV mode.



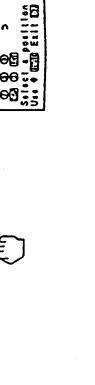
2 Press MENU.



3 Press + or - to select SET UP and press RETURN.



4 Press + or - to select CH CAPTION/GUIDE and press RETURN.



6 Press + or - to select a channel guide number button and press RETURN.

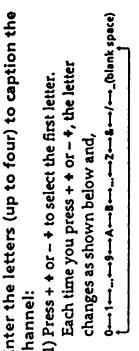
Each time you press + or - the channel positions change to red in turns. The channel number button you select will be the one you press to call up your favorite channel.



7 Press + or - to select the channel that you want to caption and press RETURN.



8 Enter the letters (up to four) to caption the channel:

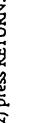


(1) Press + or - to select the first letter.

Each time you press + or - the letter

changes as shown below and,

0—1—2—3—4—5—6—7—8—9—A—B—C—D—E—F—G—H—I—J—K—L—M—N—O—P—Q—R—S—T—U—V—W—X—Y—Z—(Blank space)



(2) Repeat steps (1) and (2) to select the remaining letters and press RETURN.



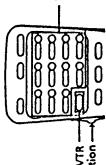
(continued)

Operating video equipment

VCR Manufacturer Code numbers

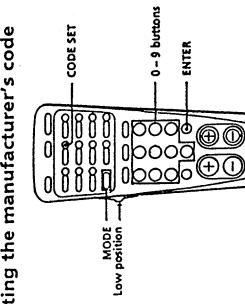
Manufacturer	Code number
SONY	01, 02, 03
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05, 08
GOLDSTAR	25
HITACHI	07, 08, 36
JVC	16, 35
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19, 26, 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05, 06
PHILCO	05, 06, 09
PHILIPS	05, 06
QUASAR	07, 08
RCA	24, 32
SAMSUNG	11, 15
SANDO	21
SCOTT	13, 14
SHARP	34
SHINTOM	05, 06, 09
Sylvania	29
SYNDROMIC	26, 29
TEKTRONIX	20, 21
TOSHIBA	25
TOTEM VISION	17
ZENITH	

Operating video equipment



You can operate video equipment that has an infrared remote sensor with the supplied remote commander. For the operations, set the manufacturer's code number.

For example, to operate a Sony 8 mm VCR, press 0, 2 and ENTER.



While pressing CODE SET, press 0-9 to enter the manufacturer's code number (see the chart in the right column). For example, to operate a Sony 8 mm VCR, press 0, 2 and ENTER.



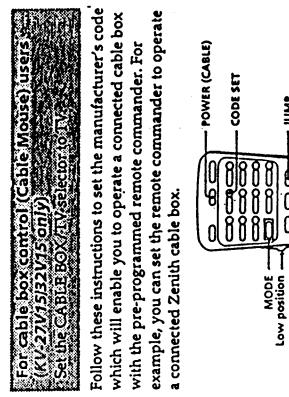
The code numbers for Sony equipment are assigned as follows:

- 01 Beta, ED Beta VCR
- 02 8 mm VCR
- 03 VHS VCR (Factory preset of Remote Commander)

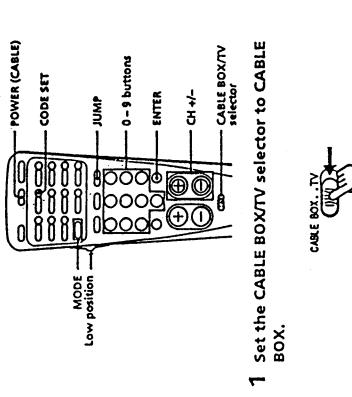
- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- In some rare cases, you may not be able to operate your non-Sony video equipment with this remote commander. This is because your equipment may use a code that is not provided with this remote commander. In this case, please use the equipment's own remote control unit.

Caution
When you remove a battery from the remote commander, the code may revert to 03. Reset the code each time you replace the battery, if necessary.

Operating a cable box



Follow these instructions to set the manufacturer's code which will enable you to operate a connected cable box with the pre-programmed remote commander. For example, you can set the remote commander to operate a connected Zenith cable box.

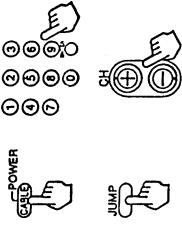


- 1 Set the CABLE BOX/TV selector to CABLE BOX.
- 2 While pressing CODE SET, press 6 and 8 (Zenith's code number — see chart on the next page) and ENTER.



(continued)

3 Use POWER(CABLE) and the TV control buttons (0 ~ 9, ENTER, JUMP and CH +/-) to operate the cable box.



To operate the TV

Set the CABLE BOX/TV selector to TV. Then use the TV control buttons to control the TV.

For more details on operating the cable box Refer to the operating instructions that come with the cable box.

Manufacturer	Code number
JERROLD	60, 61, 62, 63, 64, 65, 73
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

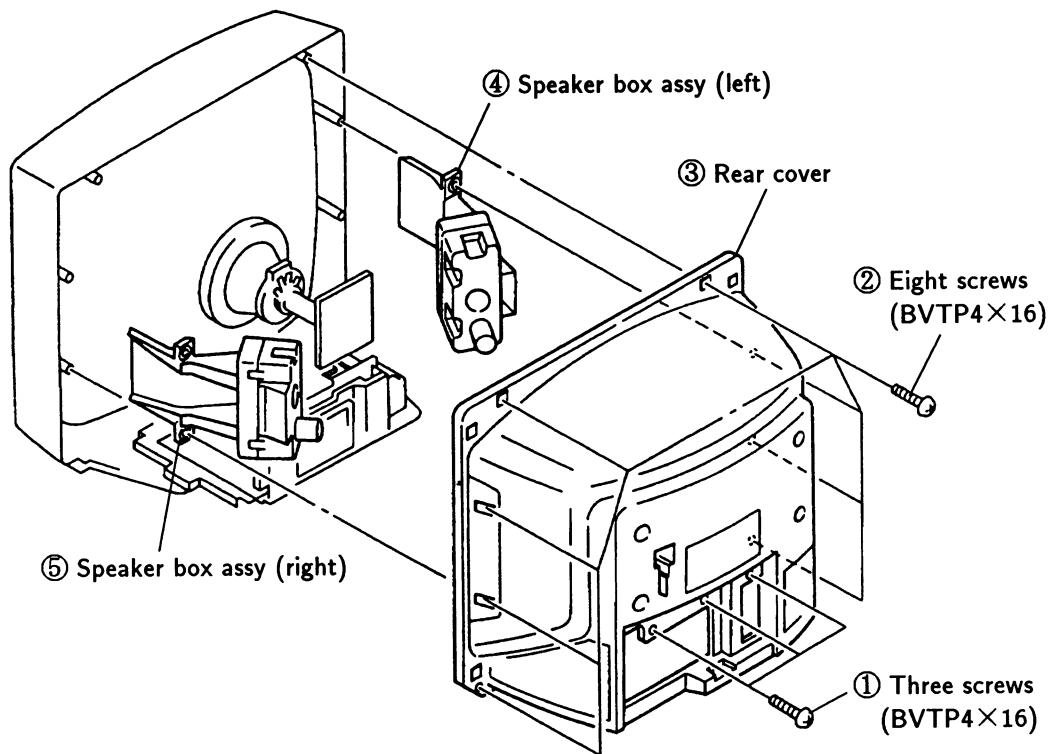
Notes

- If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some cases, your equipment may use a code that is not provided with this remote commander and you may not be able to operate your cable box with the supplied remote commander. In this case, use the equipment's own remote control unit.
- When you remove a battery from the remote commander, the code may be erased. Reset the code each time you replace the battery, if necessary.

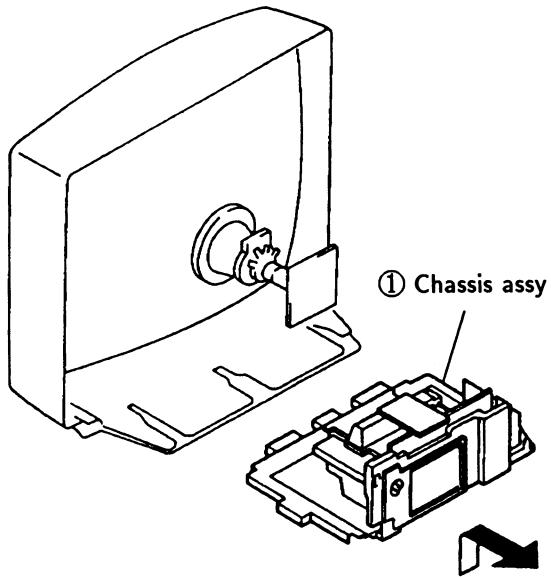
KV-27V10/27V15
RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15
RM-Y117 RM-Y117 RM-Y121
RM-CM101

SECTION 2 DISASSEMBLY

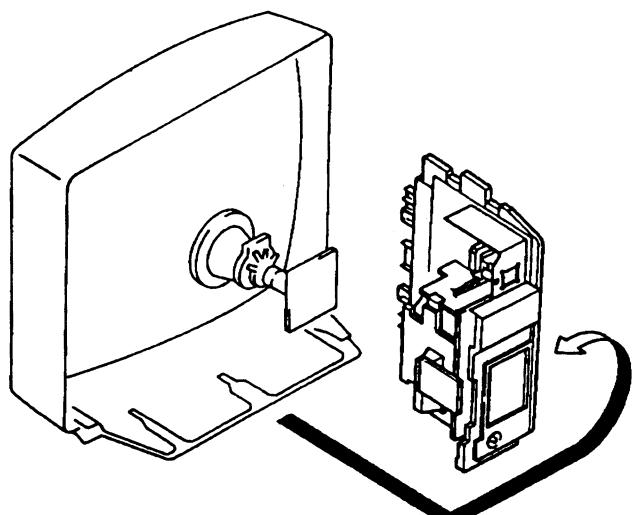
2-1. REAR COVER AND SPEAKER BOX ASSEMBLY REMOVAL



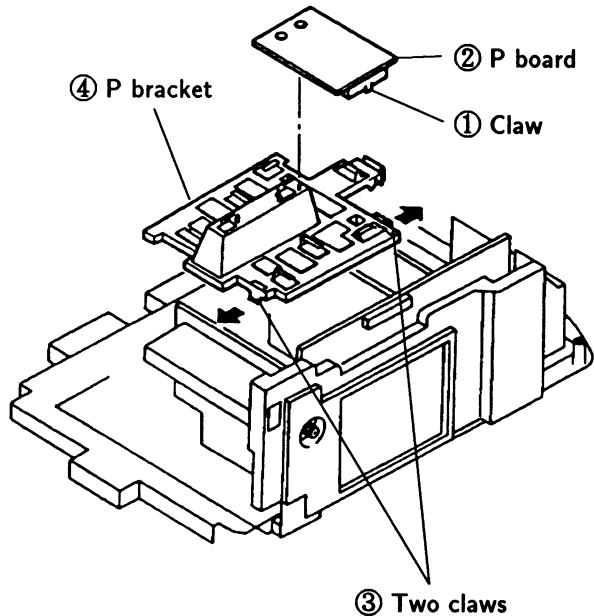
2-2. CHASSIS ASSEMBLY REMOVAL



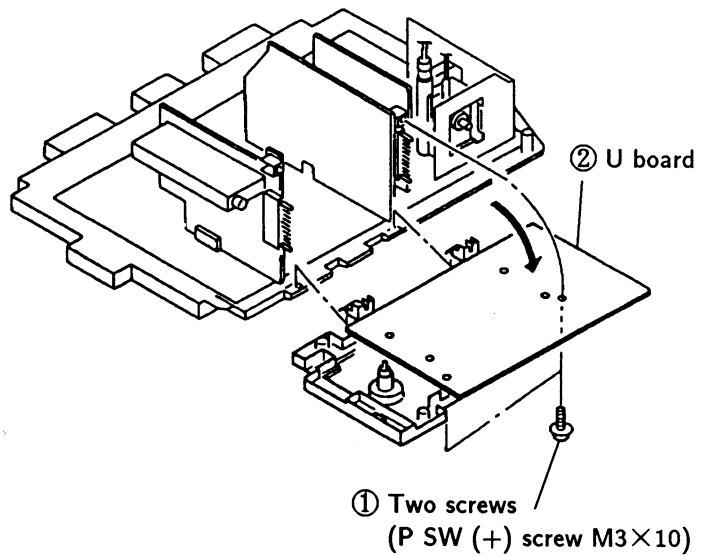
2-3. SERVICE POSITION



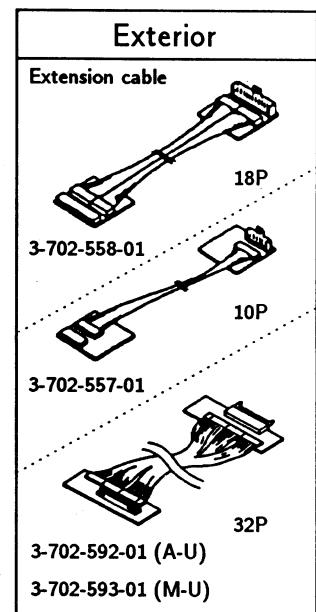
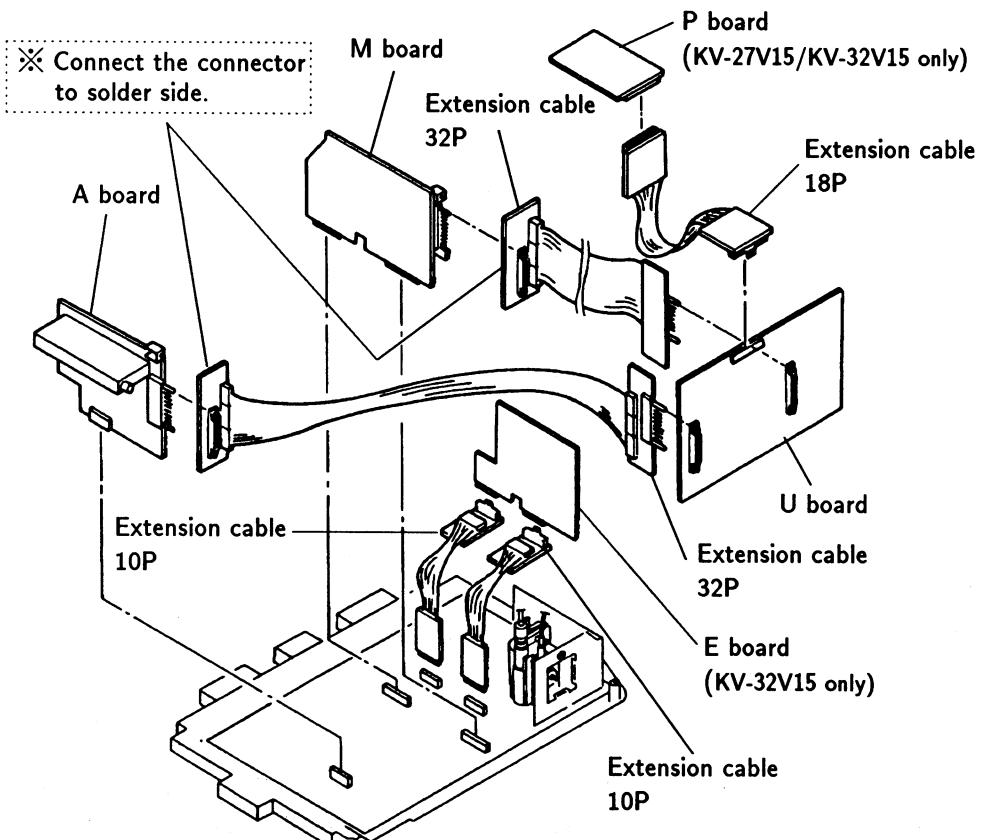
2-4. P BOARD AND BRACKET REMOVAL (KV-27V15/KV-32V15 only)



2-5. U BOARD REMOVAL

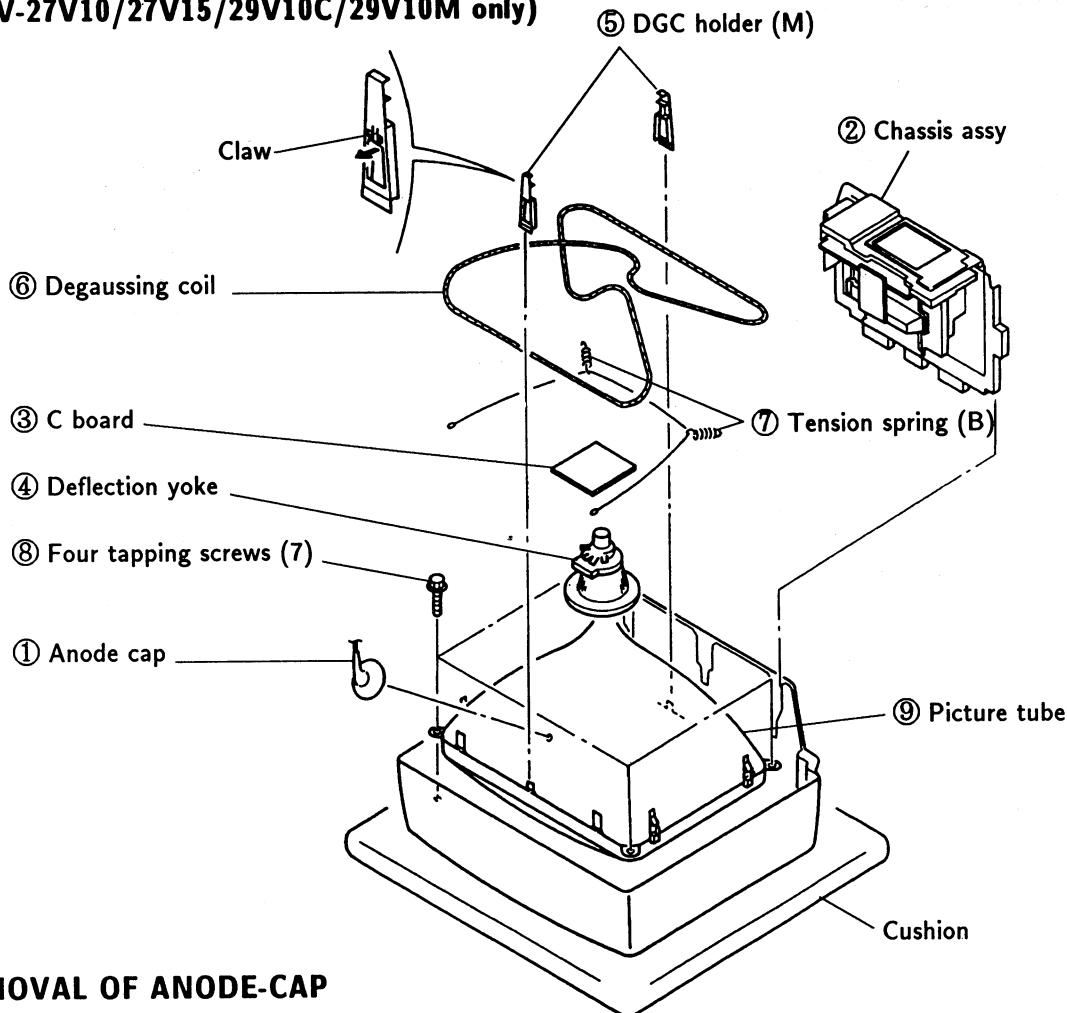


2-6. EXTENSION CABLE



2-7. PICTURE TUBE REMOVAL (1)

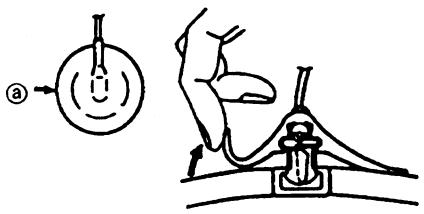
(KV-27V10/27V15/29V10C/29V10M only)



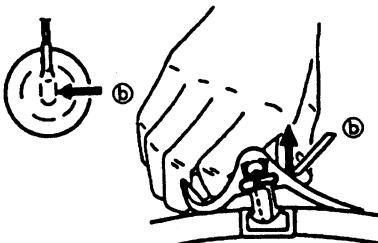
• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

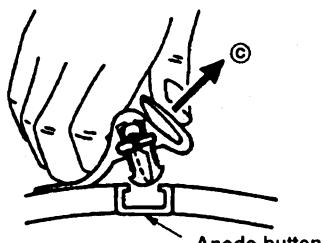
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ③.



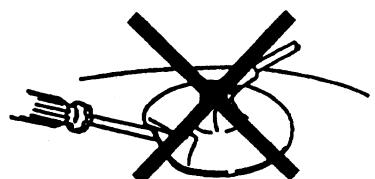
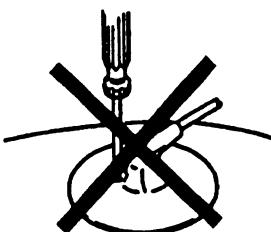
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⑤.



③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⑥.

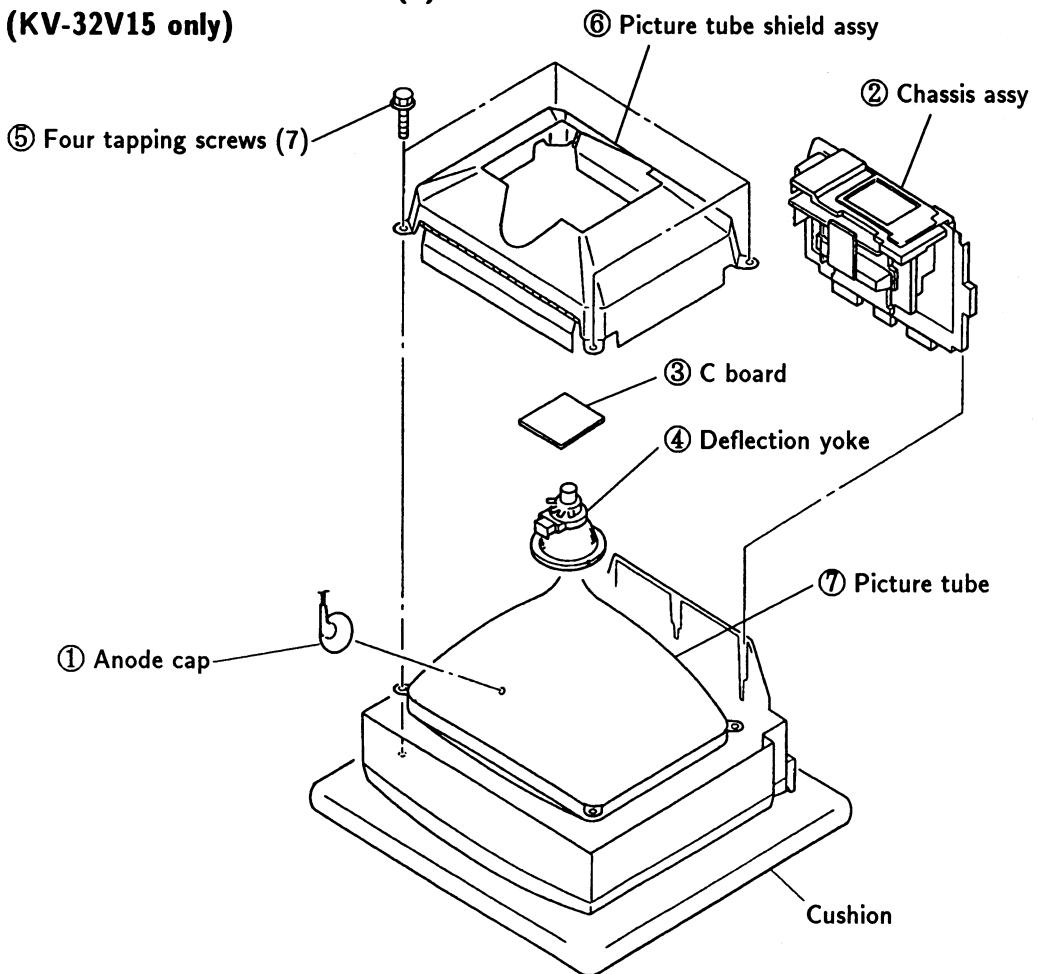
• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.



2-7. PICTURE TUBE REMOVAL (2)

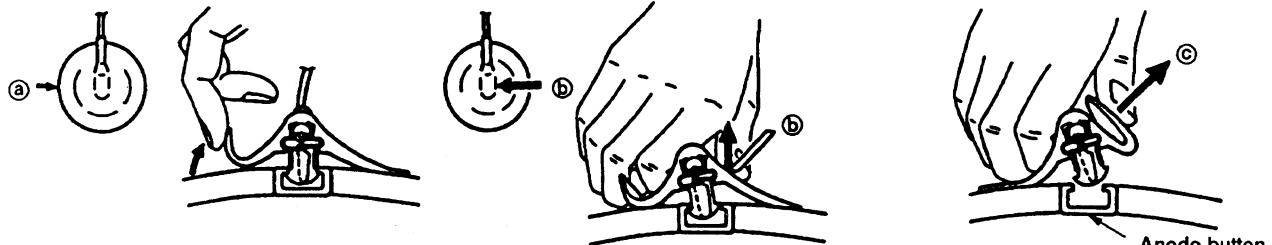
(KV-32V15 only)



• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

• REMOVING PROCEDURES

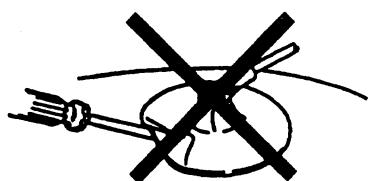
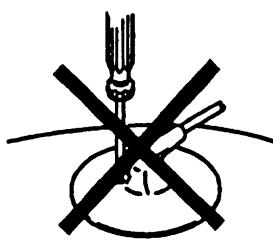


① Turn up one side of the rubber cap in the direction indicated by the arrow ②.

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ③.

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ④.

- HOW TO HANDLE AN ANODE-CAP
- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.



SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted :

PICTURE control RESET
BRIGHTNESS control center

Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
Contrast }
Brightness } normal
2. Set the pattern generator raster signal to green.
3. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
(See Figures 3-1 through 3-3.)
4. Move the deflection yoke forward and adjust so that entire screen is green. (See Figure 3-1.)
5. Switch the raster signal to blue, then to red and verify the condition.
6. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
7. If the beam does not land correctly in all the corners, use a magnet to adjust it.
(See Figure 3-4.)

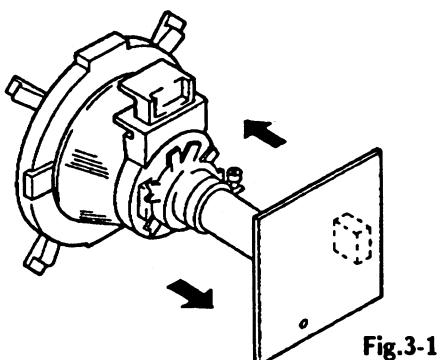


Fig.3-1

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

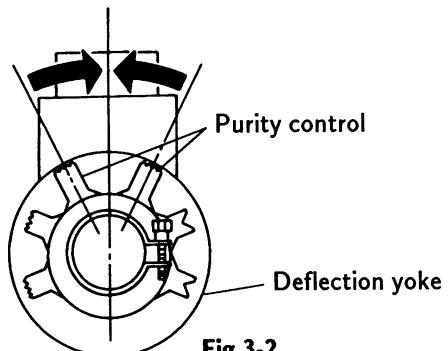


Fig.3-2

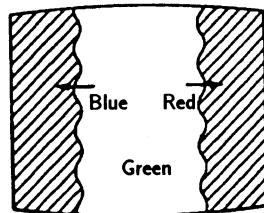


Fig.3-3

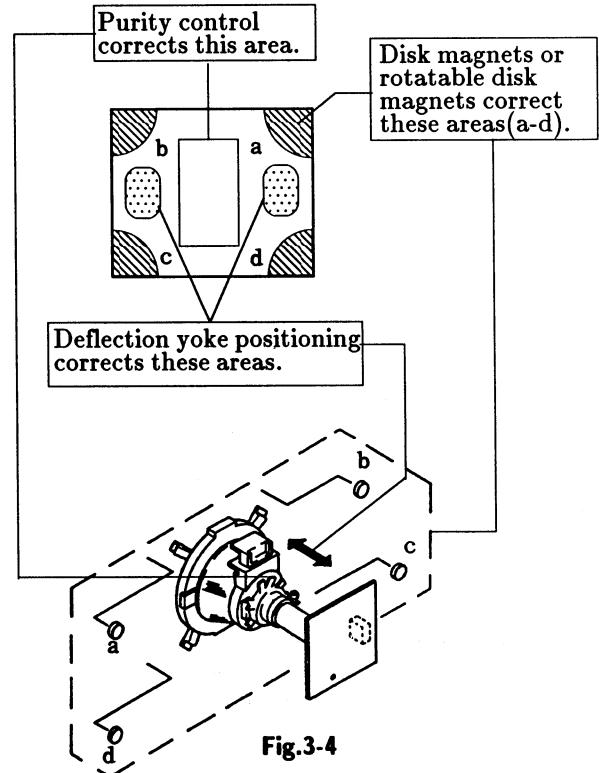


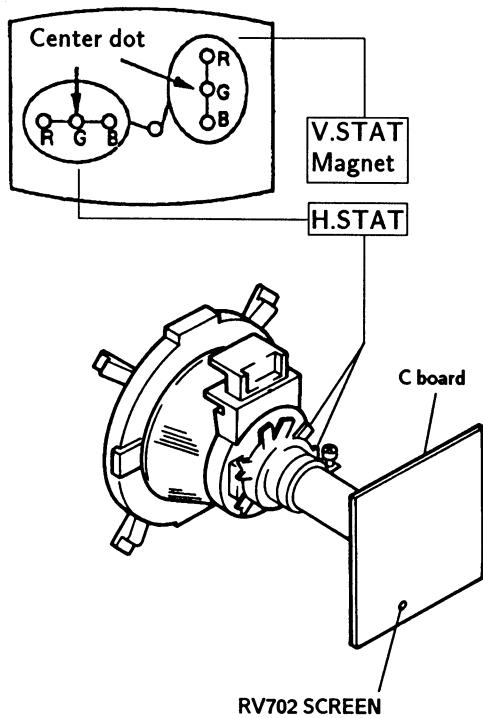
Fig.3-4

3-2. CONVERGENCE

Preparation :

- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

(1) Horizontal and Vertical Static Convergence



1. V. STAT Adjustment

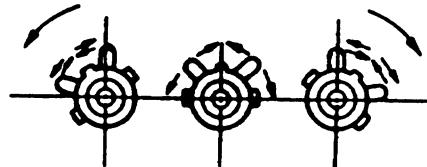
Turn the V. STAT tabs to left or right so that the vertical red, green and blue dots converge in the center of the screen.

2. H. STAT Adjustment

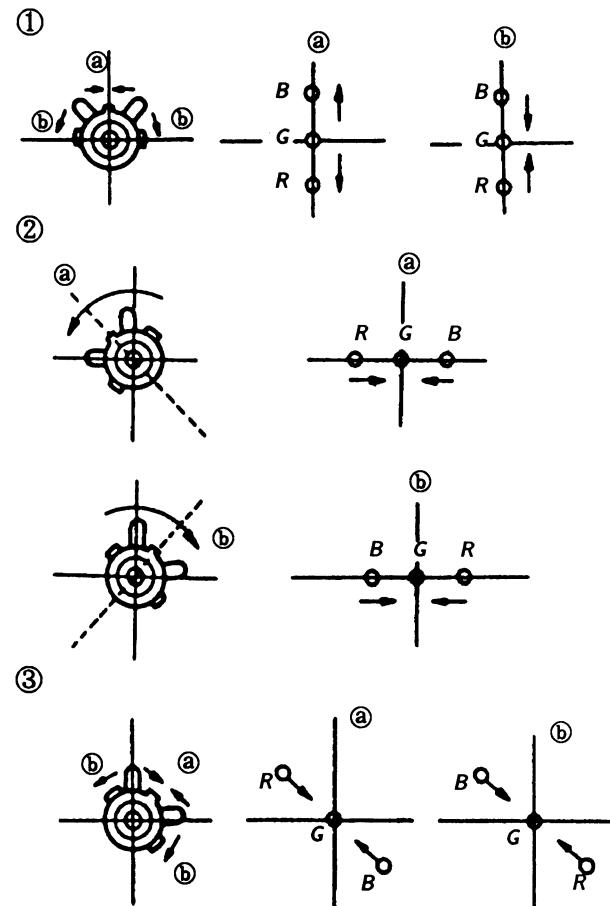
Simultaneously turn the 2 V. STAT tabs in the same direction so that the horizontal red, green and blue dots converge in the center of the screen.

Note : Do not move the purity tab during adjustment with the V. STAT tab. If the purity tab is moved, the convergence condition will change, and possibly lead to misadjustment of a different yoke.

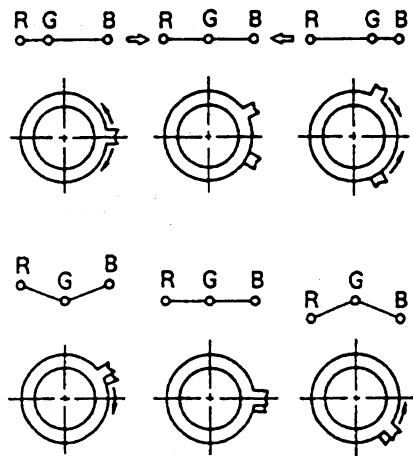
- Tilt the V. STAT tabs and adjust the static convergence by turning the V. STAT tabs to the left or right.



4. The V. STAT tabs are moved in the direction of the ② and ③ arrows and the red, green and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet



- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking.

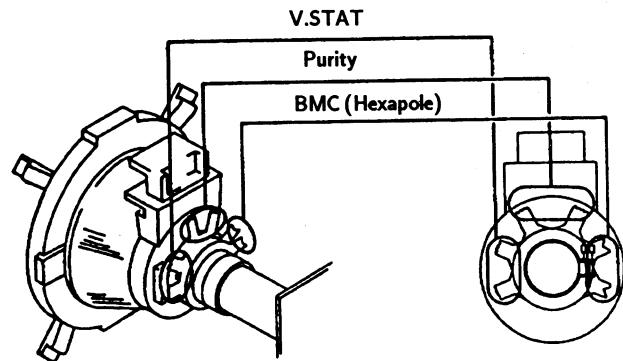
Use the V.STAT tabs to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

(2) Dynamic Convergence Adjustment

Preparations :

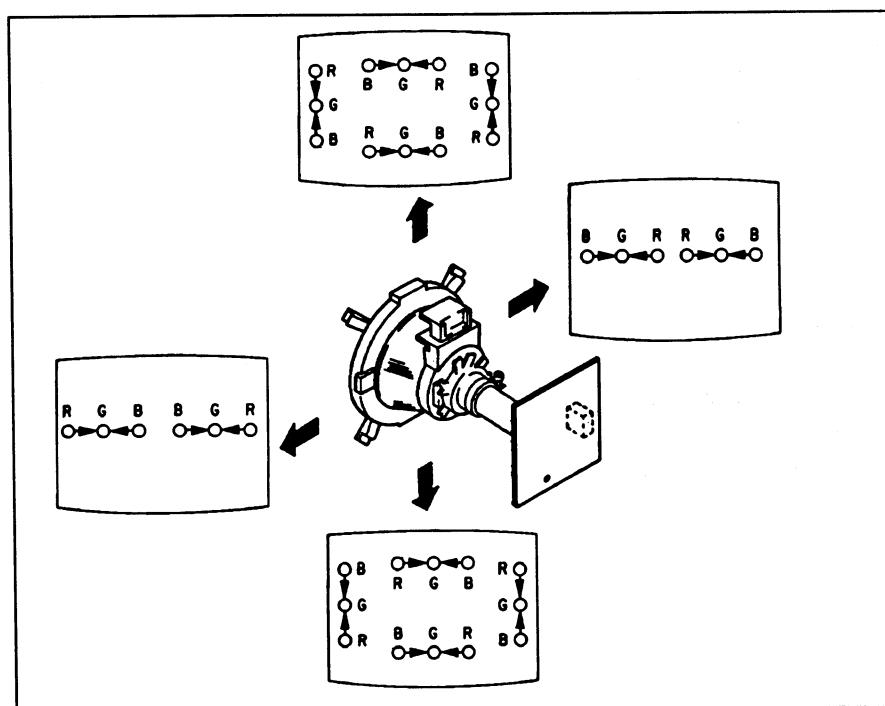
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

- Slightly loosen the deflection yoke screws.
- Remove the deflection yoke spacer.



• Y separation axis correction magnet adjustment

- Receive the cross-hatch signal, and adjust [PIX] to "MIN" and [BRT] to "standard".
- Adjust the deflection yoke to the upright condition when it hits the CRT.
- Adjust so that the Y separation axis correction magnet on the neck assembly is symmetrical at the top and bottom (open state).
- Return the deflection yoke to its original position.
- Move the deflection yoke as shown in the figure below and optimize the convergence.
- Tighten the deflection yoke screws.
- Install the deflection yoke spacer.

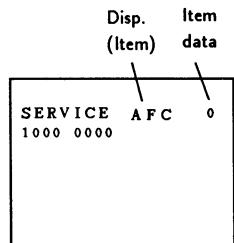


(3) Dynamic Convergence Circuit Adjustment

SERVICE MODE PROCEDURE

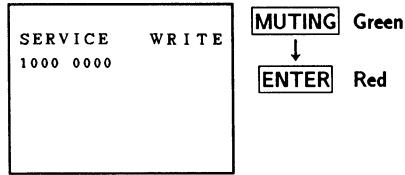
1. Standby mode.(Power off)
2. **DISPLAY** → **5** → **VOL (+)** → **POWER** on the Remote Commander. (Press each button within a second.)

SERVICE ADJUSTMENT MODE IN

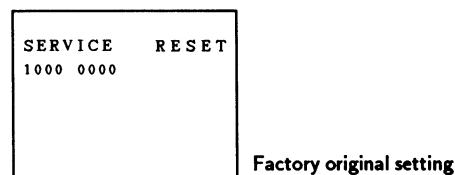


3. The CRT displays the item Being adjusted.
4. Press **1** or **4** on the Remote Commander to select the item.
5. Press **3** or **6** on the Remote Commander to change the data.
6. Press **MUTING** then **ENTER** to write into memory.

SERVICE ADJUSTMENT MODE MEMORY



7. Press **8** then **ENTER** on the Remote Commander to initlalize.



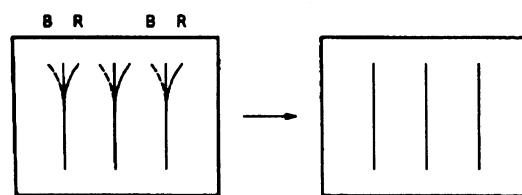
8. Turn set off and on to exit.

- Set to Service Mode.
- Input a cross-hatch signal.
- Press **1** and **4** serect an item of adjustments.
- Adjust **3** and **6** to the best picture.

No.	Disp.	Item	Ave.Data
40	UYBO	Upper Y-Bow	31
41	LYBO	Lower Y-Bow	25
42	HAMP	H. Amp	33
43	HTIL	H. Tilt	33
44	UCBO	Upper C-Bow	38
45	UTIL	Upper Tilt	40
46	LCBO	Lower C-Bow	41
47	LTIL	Lower Tilt	46
48	DCSH	DC Shift	37

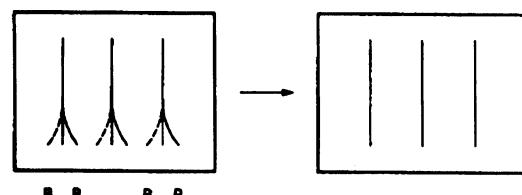
U. YBOW

Select UYBO with **1** and **4**



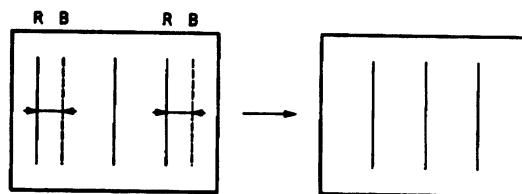
L. YBOW

Select LYBO with **1** and **4**



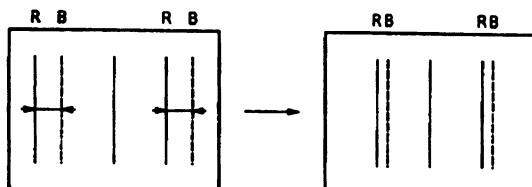
H. AMP

Select HAMP with **1** and **4**

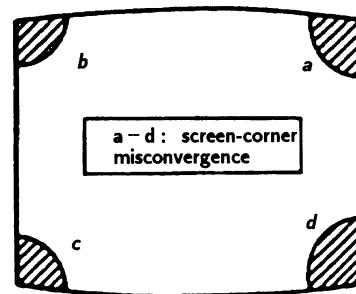


H. TILT

Select HTILT with **1** and **4**

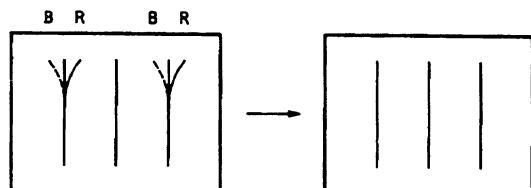


(4) Screen-corner Convergence



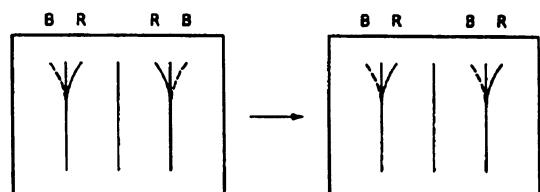
U. CBOW

Select UCBO with **1** and **4**



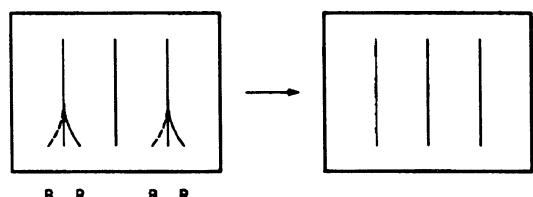
U. TILT

Select UTIL with **1** and **4**



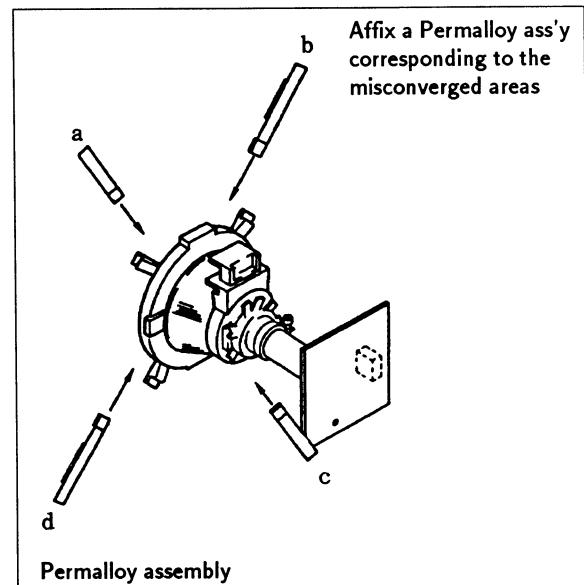
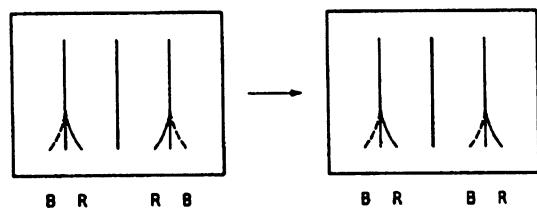
L. CBOW

Select LCBO with **1** and **4**



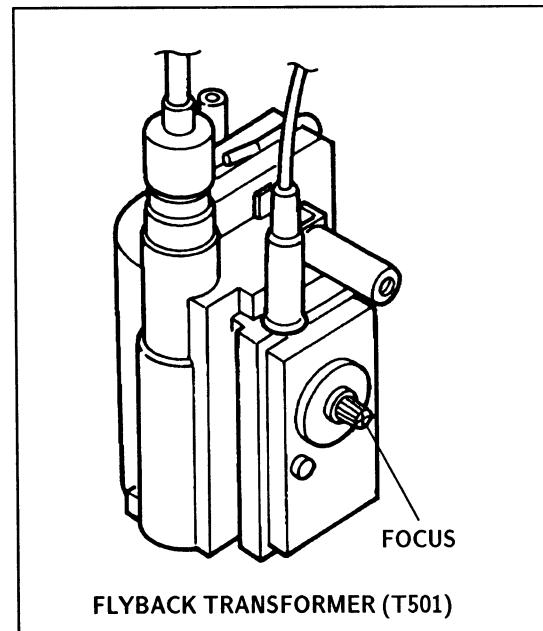
L. TILT

Select L. TIL with **1** and **4**



3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for a best focus.



3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT (RV 702)
 1. Set the PICTURE and BRIGHTNESS to normal.
 2. Apply DC voltage of 170 V to the cathodes of R, G and B from DC stabilized power source.
 3. While watching the picture, adjust the G2 control (RV 702) to the just the retrace line disappears.

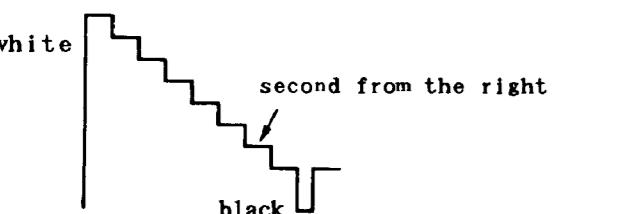
2. WHITE BALANCE ADJUSTMENTS

No.	Disp.	Item	Ave. Data
14	GAMP	Green Amp	20
15	BAMP	Blue Amp	17
16	GCUT	Green Cut-off	7
17	BCUT	Blue Cut-off	8
22	SBRT	Sub Bright	35

1. Input an entire white signal.
2. Set to service adjustment mode.
3. Set the PICTURE and BRIGHT to minimum.
4. Adjust with SBRT if necessary.
5. Select G CUT and B CUT with 1 and 4.
6. Adjust with 3 and 6 for the best white balance.
7. Set the PICTURE and BRIGHT to maximum.
8. Select GAMP and BAMP with 1 and 4.
9. Adjust with 3 and 6 for the best white balance.
10. Write into the memory by pressing MUTING then ENTER.

3. SUB BRIGHT ADJUSTMENT

1. Set to service mode.
2. Input a staircase signal of black and white from the pattern generator.
3. BRIGHTNESS ... RESET
PICTURE minimum
4. Select SBRT with 1 and 4, and adjust SUB BRIGHT level with 3 and 6 so that the stripe second from the right is dimly lit.



SECTION 4 SAFETY RELATED ADJUSTMENTS

R511 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with on the schematic diagram).
PM501, R338, R511, R632, R645, R650

①

1. Preparation before confirmation
 - 1) Remove R635 on the D board and connect a variable resistor (RV1: about $4.7k\Omega$ - $10k\Omega$) between pin ① of IC601 and B+ line.
 - 2) Supply 130 ± 2.0 V AC to with variable autotransformer.
2. Hold-down operation confirmation
 - 1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to $1760\pm50\mu A$ with PICTURE and BRIGHT etc controls.
 - 2) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 142.5V DC (27 inch) 140.0V DC (32 inch) whereby the raster disappears during operation of hold-down circuit.

NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

- 3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to $160\pm50\mu A$ with PICTURE and BRIGHT etc controls.
- 4) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 145.0V DC (27 inch), 143.5V DC (32 inch) whereby the raster disappears during operation of hold-down circuit.

NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R511 (a component marked with).

R524 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with on the schematic diagram).
IC601, PM501, D504, C598, R338, R509, R524, R632, R635, R645, T501

②

1. Preparation before confirmation
 - 1) Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHT controls to maximum.
 - 2) Confirm that voltage of the check terminal of TP-85 (D BOARD) is more than 114.0V DC (27 inch) 122.3V DC (32inch) when the set is operating normally with 120.0 ± 2.0 V AC supply.

2. Hold-down operation confirmation

- 1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to $1760\pm50\mu A$ with PICTURE and BRIGHT etc controls.
- 2) Apply DC voltage of over 130.0V DC gradually to the check terminal of TP-85 (D BOARD) via 1T40 from the DC stabilized power source. Confirm that the minimum voltage is less than 137.5V DC (27inch) 143.5V DC (32inch) whereby the raster disappears during operation of hold-down circuit.

NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

- 3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to $160\pm50\mu A$ with PICTURE and BRIGHT etc controls.

- 4) Apply DC voltage of over 130.0V gradually to the check terminal of TP-85 (D BOARD) via 1 T40 from the DC stabilized power source. Confirm that the minimum voltage is less than 138.0V DC (27inch) 144.1V DC (32inch) whereby the raster disappears during operation of hold-down circuit.

NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3. Hold-down readjustment

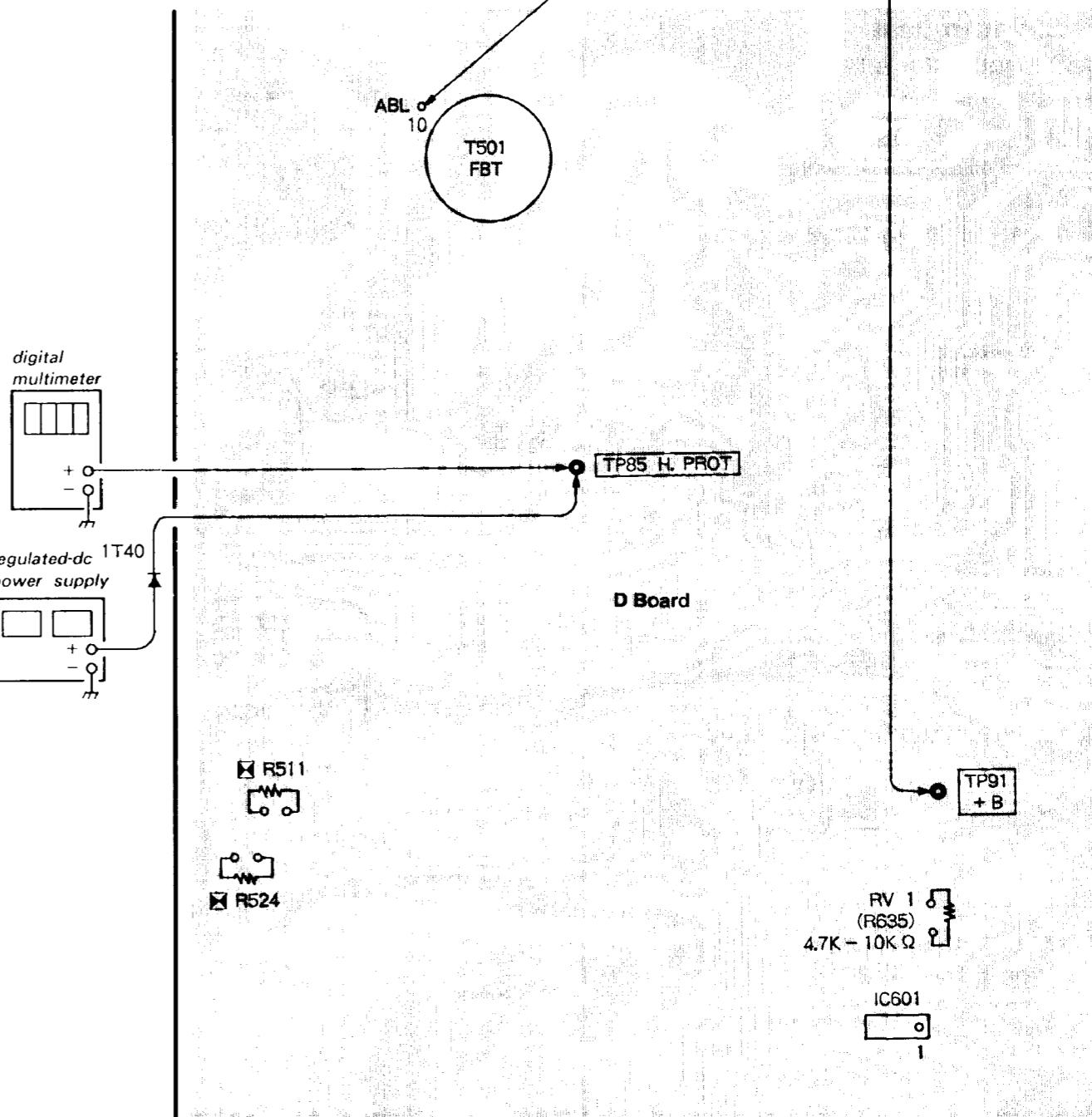
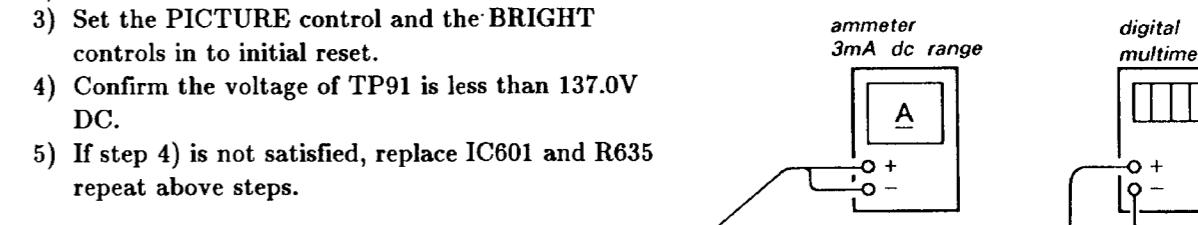
When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R524 (a component marked with).

B+ VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC601 and R635.

- 1) Supply 130 ± 2.0 V AC to with variable autotransformer.
- 2) Receive entirely monoscope signal.
- 3) Set the PICTURE control and the BRIGHT controls in to initial reset.
- 4) Confirm the voltage of TP91 is less than 137.0V DC.
- 5) If step 4) is not satisfied, replace IC601 and R635 repeat above steps.

- * Use a digital multimeter whose input impedance over $100 M\Omega$ when confirming the voltage of the protector terminal of TP85.

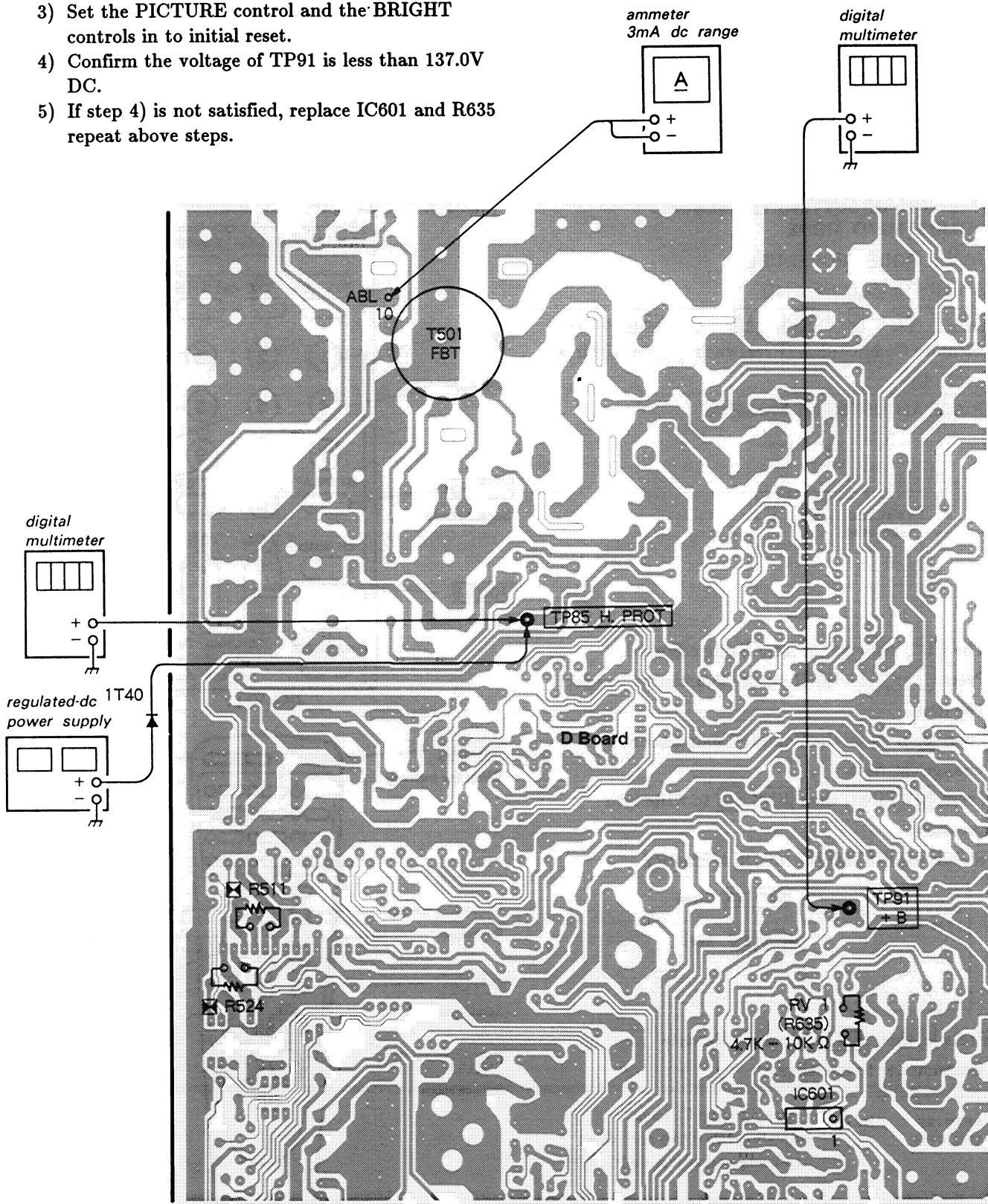


B+ VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC601 and R635.

- 1) Supply $130 \pm 5\%$ AC to with variable autotransformer.
- 2) Receive entirely monoscope signal.
- 3) Set the PICTURE control and the BRIGHT controls in to initial reset.
- 4) Confirm the voltage of TP91 is less than 137.0V DC.
- 5) If step 4) is not satisfied, replace IC601 and R635 repeat above steps.

- * Use a digital multimeter whose input impedance over $100 \text{ M}\Omega$ when confirming the voltage of the protector terminal of TP85.



SECTION 5

CIRCUIT ADJUSTMENTS

5-1. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

Use of Remote Commander can be performed circuit adjustments about this model.

NOTE : Test Equipment Required.

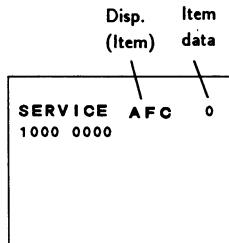
1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio OSC

1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

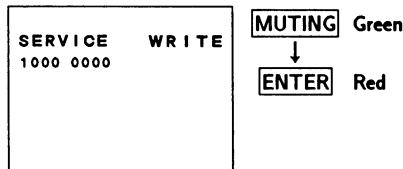
1. Standby mode.(Power off)
2. **DISPLAY** → **5** → **VOL (+)** → **POWER** on the Remote Commander. (Press each button within a second.)

SERVICE ADJUSTMENT MODE IN

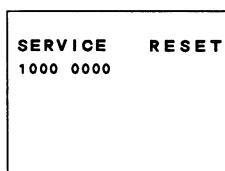


3. The CRT displays the item Being adjusted.
4. Press **1** or **4** on the Remote Commander to select the item.
5. Press **3** or **6** on the Remote Commander to change the data.
6. Press **MUTING** then **ENTER** to write into memory.

SERVICE ADJUSTMENT MODE MEMORY



7. Press **8** then **ENTER** on the Remote Commander to initialize.



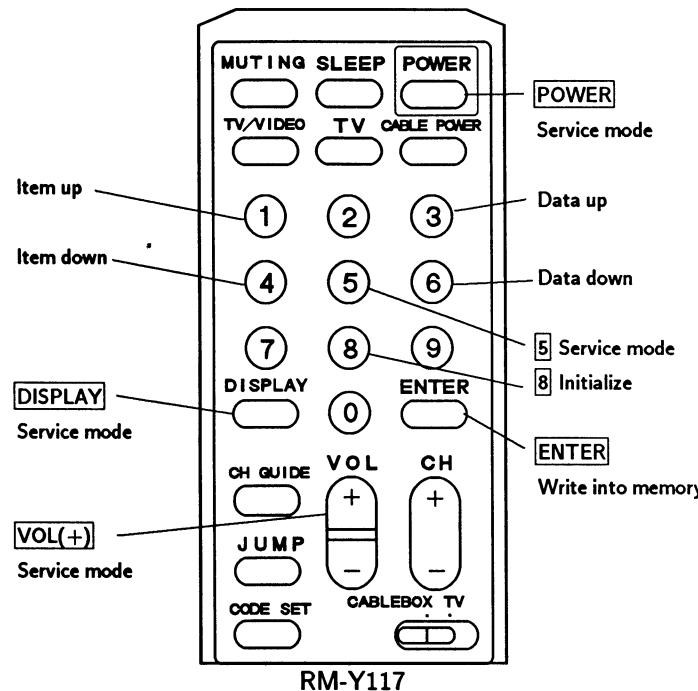
Carry out step 7) when adjusting IDs 0 to 4 and when replacing and adjusting IC102.

Factory original setting

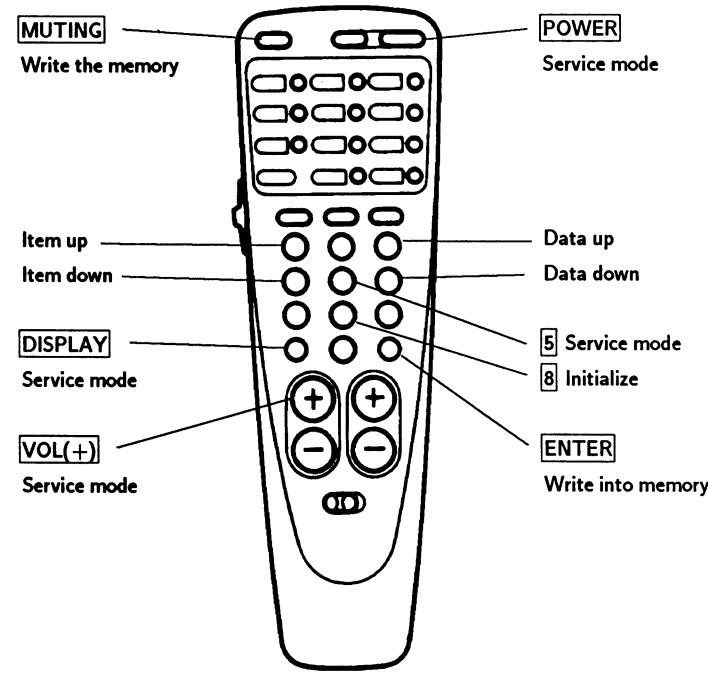
2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again, confirm they were adjusted.

3. ADJUST BUTTONS AND INDICATOR



RM-Y117



RM-Y121

4. AN ITEM OF ADJUSTMENTS

No.	Disp.	Item	Data range	Ave. data (27 inch)	Ave. data (32 inch)
1	AFC	AFC Loop Gain	0~3	* 0	* 0
2	HFRE	H. Frequency	0~127	70	70
3	VFRE	V. Frequency	0~31	14	14
4	VPOS	V. Center	0~31	17	17
5	VSIZ	V. Size	0~63	28	28
6	VLIN	V. Linearity	0~15	8	8
7	VSCO	V. Correction	0~15	6	6
8	HPOS	H. Center	0~15	6	6
9	HSIZ	H. Size	0~31	31	31
10	PAMP	Pin Amp	0~31	24	24
11	CPIN	Corner Pin	0~7	3	3
12	PPHA	Pin Phase	0~15	6	6
13	VCOM	V. Compensation	0~7	* 2	* 2
14	GAMP	Green Amp	0~31	20	20
15	BAMP	Blue Amp	0~31	17	17
16	GCUT	Green Cut Off	0~15	7	7
17	BCUT	Blue Cut Off	0~15	8	8
18	CROM	Chroma Trap	0~63	* 28	* 28
19	SPIX	Sub Contrast	0~63	20	20
20	SHUE	Sub Hue	0~63	33	33
21	SCOL	Sub Color	0~63	32	32
22	SBRT	Sub Bright	0~63	35	35
23	RGBP	RGB Picture	0~63	* 30	* 10
24	SHAP	Sharpness	0~15	* 10	7
25	VSMO	V Pull in Range	0, 1	* 0	* 0
26	REF	Refference line	0~3	* 2	* 2
27	ROFF	Red Out	0, 1	1	1
28	GOFF	Green Out	0, 1	1	1
29	BOFF	Blue Out	0, 1	1	1
30	ABLM	ABL Mode	0, 1	* 0	* 0
31	NOTC	Notch On/Off	0, 1	* 1	* 1
32	DRGB	OSD intensity	0, 1	* 0	* 0
33	DISP	Display Position	0~63	40	40
34	DPDV	Lumipon (dpdv)	0~3	* 1	* 1
35	MPIC	Lumipon (depth)	0~63	* 48	* 48
36	SVOL	Sub Volume	0~15	* 0	* 0
37	SBAL	Sub Balance	0~15	7	7
38	BASS	Sub Bass	0~15	* 8	* 8
39	TRE	Sub Treble	0~15	* 8	* 8
40	UYBO	Upper Y. Bow	0~63	31	31
41	LYBO	Lower Y. Bow	0~63	25	25
42	HAMP	H. Amp	0~63	33	33
43	HTIL	H. Tilt	0~63	33	33
44	UCBO	Upper C. Bow	0~63	38	38
45	UTIL	Upper Tilt	0~63	40	40
46	LCBO	Lower C. Bow	0~63	41	41
47	LTIL	Lower Tilt	0~63	46	46
48	DCSH	DC. Shift	0~63	37	37
49	PHPO	PinP H Position	0~127	76	76
50	PHUE	PinP Hue	0~127	* 0	* 0
51	ID-0	Model ID	0~127	by Model	by Model
52	ID-1	Model ID	0~127	by Model	by Model
53	ID-2	Model ID	0~127	by Model	by Model
54	ID-3	Model ID	0~127	by Model	by Model
55	ID-4	Model ID	0~127	by Model	by Model

Note : No. from 1 to 55 is to show adjustment order.

SERVICE ID 0 64	
1000 0000	1000 0000

Please adjust the function values as shown below when IC 102 on M board was replaced.

KV-27V 10 (US/CND)

No.	Disp.	Disp.	Data
51	ID-0	1 1 1 1 0 0 0	120
52	ID-1	1 1 1 1 1 1 1	127
53	ID-2	1 0 0 1 0 0 0	72
54	ID-3	0 0 0 0 0 0 0	0
55	ID-4	0 0 1 0 0 0 1	17

KV-27V 15 (US/CND)

No.	Disp.	Disp.	Data
51	ID-0	1 1 1 1 0 0 0	120
52	ID-1	1 1 1 1 1 1 1	127
53	ID-2	1 0 0 1 0 0 0	72
54	ID-3	1 0 0 0 0 0 0	64
55	ID-4	0 0 1 0 0 1 1	19

KV-29V 10 C (WP)/29 V 10 M (E)

No.	Disp.	Disp.	Data
51	ID-0	1 1 1 1 0 0 0	120
52	ID-1	1 1 1 1 1 1 1	127
53	ID-2	0 1 0 0 0 0 0	32
54	ID-3	0 0 0 0 0 0 0	0
55	ID-4	0 0 1 0 0 0 1	17

KV-32 V 15 (US/CND)

No.	Disp.	Disp.	Data
51	ID-0	1 1 1 1 0 0 0	120
52	ID-1	1 1 1 1 1 1 1	127
53	ID-2	1 0 0 1 0 0 0	72
54	ID-3	0 1 0 0 1 0 0	36
55	ID-4	0 0 1 0 0 1 1	19

* : Set-up value

5-2. M BOARD ADJUSTMENTS

H.FREQUENCY ADJUSTMENT (HFRE)

1. Input a color-bar signal.
2. Set to Service adjustment Mode.
3. Connect a frequency counter to CN131 Pin⑬ (H. DRIVE) connector and ground.
4. Call the item of AFC, set to 3 level (free run).
5. Select HFRE with **1** and **4**.
6. Adjust with **3** and **6** for the $15734 \pm 60\text{Hz}$.
7. Call the item of AFC again, adjust the level "0".
8. Write into the memory by pressing **MUTING** then **ENTER**.

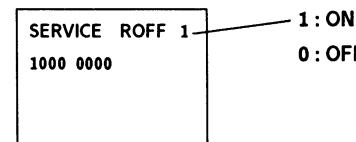
V.FREQUENCY ADJUSTMENT (VFRE)

1. Select video 1 with no connecting the signal.
2. Set to Service adjustment Mode.
3. Connect the frequency counter across connector CN131 Pin⑦ (V. DRIVE) connector and ground.
4. Select VFRE with **1** and **4**.
5. Adjust with **3** and **6** for the $56 \pm 0.5\text{Hz}$.
6. Write the memory by pressing **MUTING** then **ENTER**.

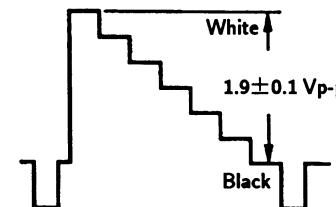
SUB CONTRAST ADJUSTMENT (SPIX)

1. Input a color-bar signal.
2. Set to Service adjustment Mode.
3. Set the conditions as follows.

PICTURE	.....	MAX
COLOR	.....	MIN
BRIGHT	.....	CENTER
R OFF	.....	ON (1)
G OFF	.....	OFF (0)
B OFF	.....	OFF (0)



4. Connect an oscilloscope to CN703 Pin① (R OUT) of C board and ground.
5. Select SPIX with **1** and **4**.
6. Adjust with **3** and **6** for the $1.9 \pm 0.1\text{Vp-p}$.

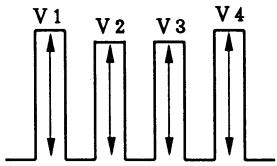


7. Write the memory by pressing **MUTING** then **ENTER**.
8. Return the following back to normal after adjustment.

PICTURE	.....	MAX
BRIGHT	.....	CENTER
COLOR	.....	CENTER
R OFF	.....	ON
G OFF	.....	ON
B OFF	.....	ON

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

1. Input a color-bar signal.
2. Set to service adjustment mode.
3. Connect an oscilloscope to CN703 Pin③ (B OUT) of C board.
4. Select SHUE and SCOL with **1** and **4**.
5. Adjust with **3** and **6** for the V1=V4 (SCOR) and V2 =V3 (SHUE).



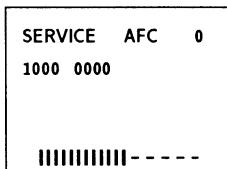
6. Increase the data of SCOL by 3 steps.
7. Write into the memory by pressing **MUTING** then **ENTER** .

SUB BARANCE ADJUSTMENT (SBAL)

1. Input a stereo signal.
2. Set to service adjustment mode.
3. Select SBAL with **1** and **4**.
4. Adjust with **3** and **6** for the best sound balance
5. Write into the memory by pressing **MUTING** then **ENTER** .

DISPLAY POSITION ADJUSTMENT (DISP)

1. Input a color-bar signal.
2. Set to service adjustment Mode.
3. Select DISP with **1** and **4**.
4. Adjust with **3** and **6** for the bar center.
5. Write the memory by pressing **MUTING** then **ENTER** .

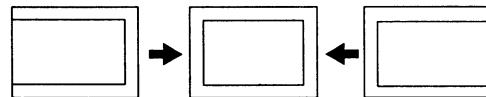


H.CENTER ADJUSTMENT (H POS)

Note: Perform this adjustment after H.FREQUENCY ADJUSTMENT (HFRE) .

1. Input a cross-hatch signal.
2. Set the Service adjustment mode.
3. Select HPOS with **1** and **4** .
4. Adjust with **3** and **6** to the best horizontal center.
5. Write into the memory by pressing **MUTING** then **ENTER** .

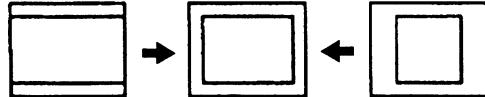
H. CENTER (HPOS)



H.SIZE ADJUSTMENT (HSIZ)

1. Input a cross-hatch signal.
2. Set to service adjustment Mode.
3. Select HSIZ with **1** and **4** .
4. Adjust with **3** and **6** for best horizontal size.
5. Write into the memory by pressing **MUTING** then **ENTER** .

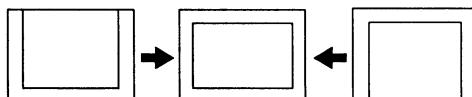
H. SIZE (HSIZ)



V.CENTER ADJUSTMENT (VPOS)

1. Input a cross-hatch signal.
2. Set to service adjustment Mode.
3. Select VPOS with **1** and **4** .
4. Adjust with **3** and **6** for the best vertical senter.
5. Write into the memory by pressing **MUTING** then **ENTER** .

V. CENTER (VPOS)



V.SIZE ADJUSTMENT (VSIZ)

1. Input a cross-hatch signal.
2. Set to service adjustment Mode.
3. Select VSIZ with **1** and **4**.
4. Adjust with **3** and **6** for the best vertical size.
5. Write into the memory by pressing **MUTING** then **ENTER**.

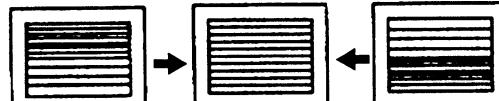
V. SIZE (VSIZ)



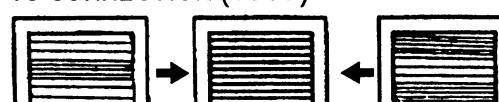
V LINEARITY(VLIN), VS CORRECTION(VSCO), PIN AMP(PAMP), CORNER PIN(CPIN), AND PIN PHASE(PPHA) ADJUSTMENTS

1. Input a cross-hatch signal.
2. Set to Service adjustment Mode.
3. Select VLIN, VSCO, PAMP, CPIN, and PPHA with **1** and **4**.
4. Adjust with **3** and **6** for the best picture.
5. Write the memory by pressing **MUTING** then **ENTER**.

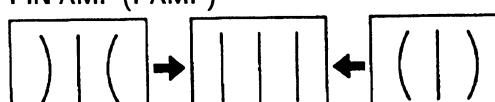
V LINEARITY (VLIN)



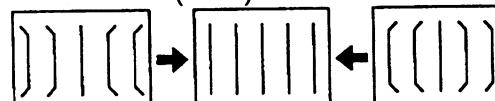
VS CORRECTION (VSCO)



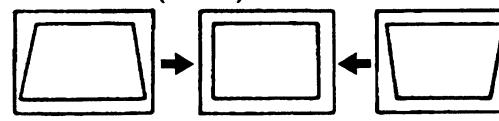
PIN AMP (PAMP)



CORNER PIN (CPIN)



PIN PHASE (PPHA)



5-3. P BOARD ADJUSTMENTS (KV-27V15/32V15 only)

P IN P H. POSITION (PHPO)

1. Input a color-bar signal
2. Set to Service adjustment Mode.
3. Select PHPO with **1** and **4**.
4. Adjust with **3** and **6** for the best balanced cent position at 4 corner P in P display position.
5. Write the memory by pressing **MUTING** then **ENTER**.

SECTION 6 PICTUREGRAMS

6-1. BLOCK DIAGRAMS (1)

7V15
4-Y121/RM-CM101
29V10M/32V15
RM-Y117 RM-Y121
RM-CM101

10/27V15
1117 RM-Y121/RM-CM101
10C/29V10M/32V15
-Y117 RM-Y117 RM-Y121
RM-CM101

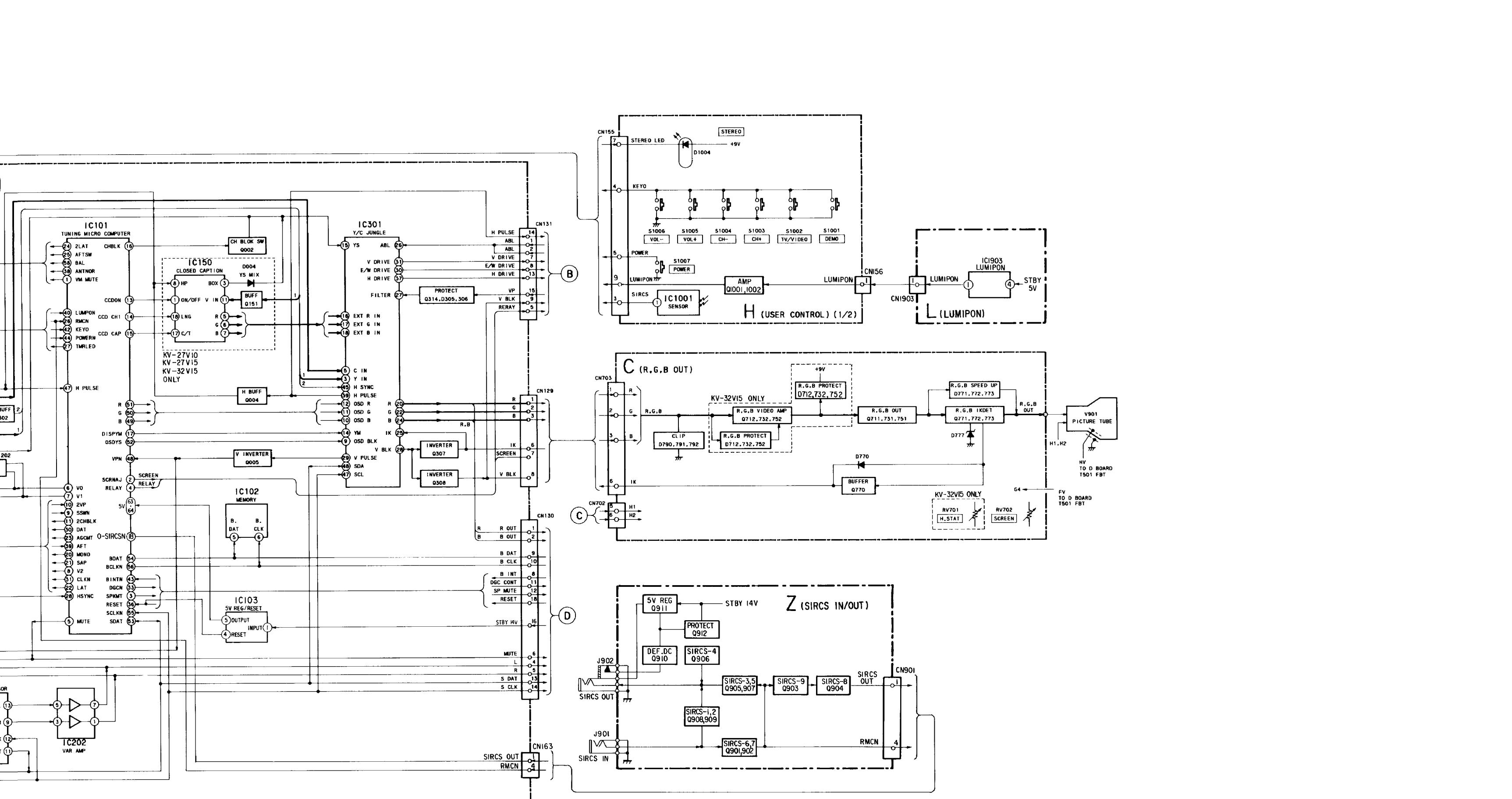
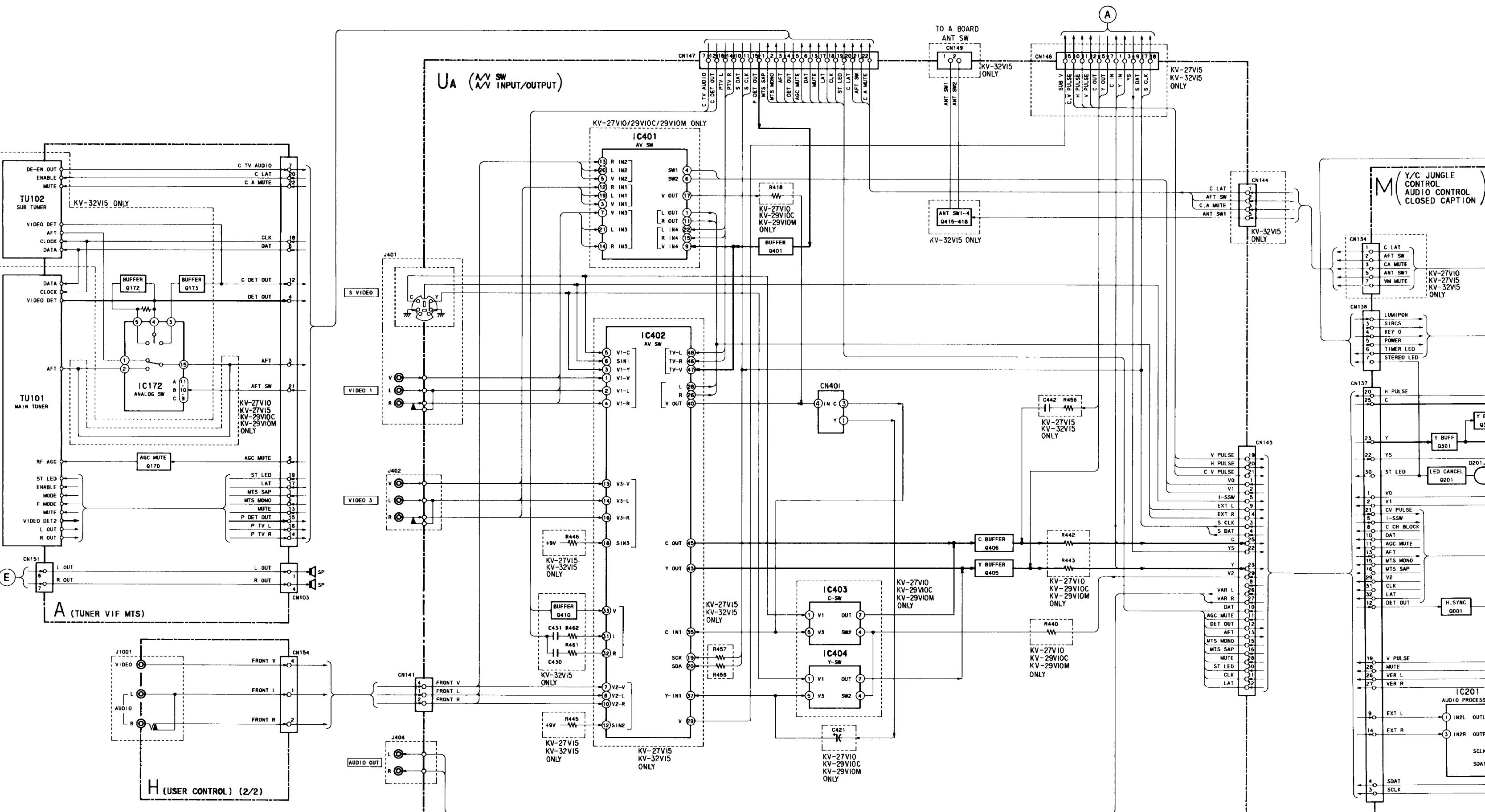
KV-27V10/27V15
RM-Y117 RM-Y121/RM-CD
KV-29V10C/29V10M/J
RM-Y117 RM-Y117

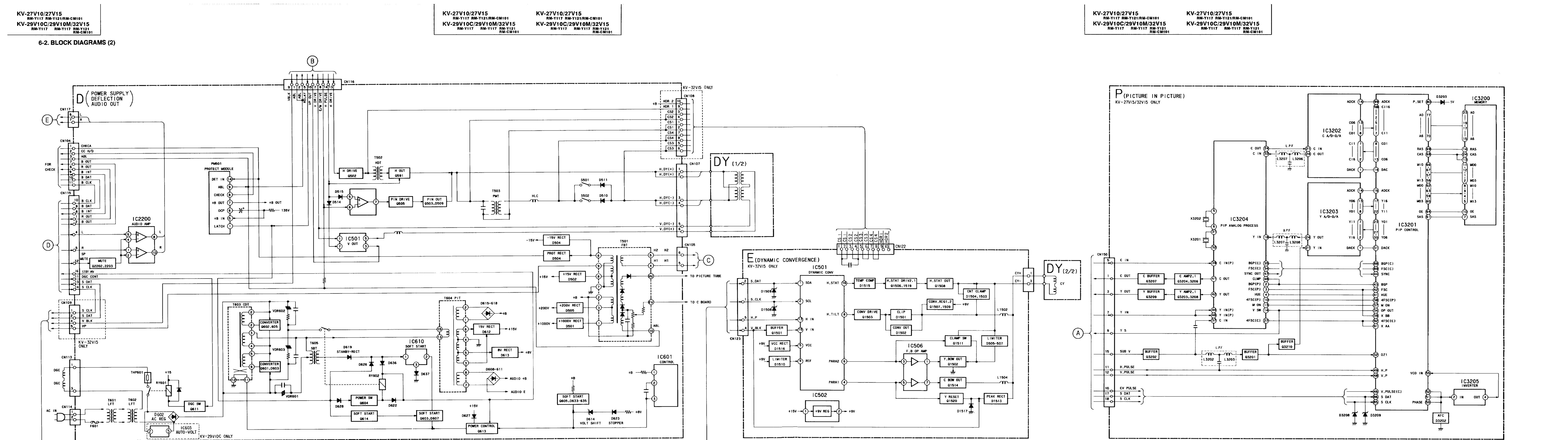
5 KV-27V10/27V1
11 RM-Y117 RM-Y12
10 KV-29V10C/29V1
101 RM-Y117 RM

CM101
/32V15
RM-Y121
RM-CM101

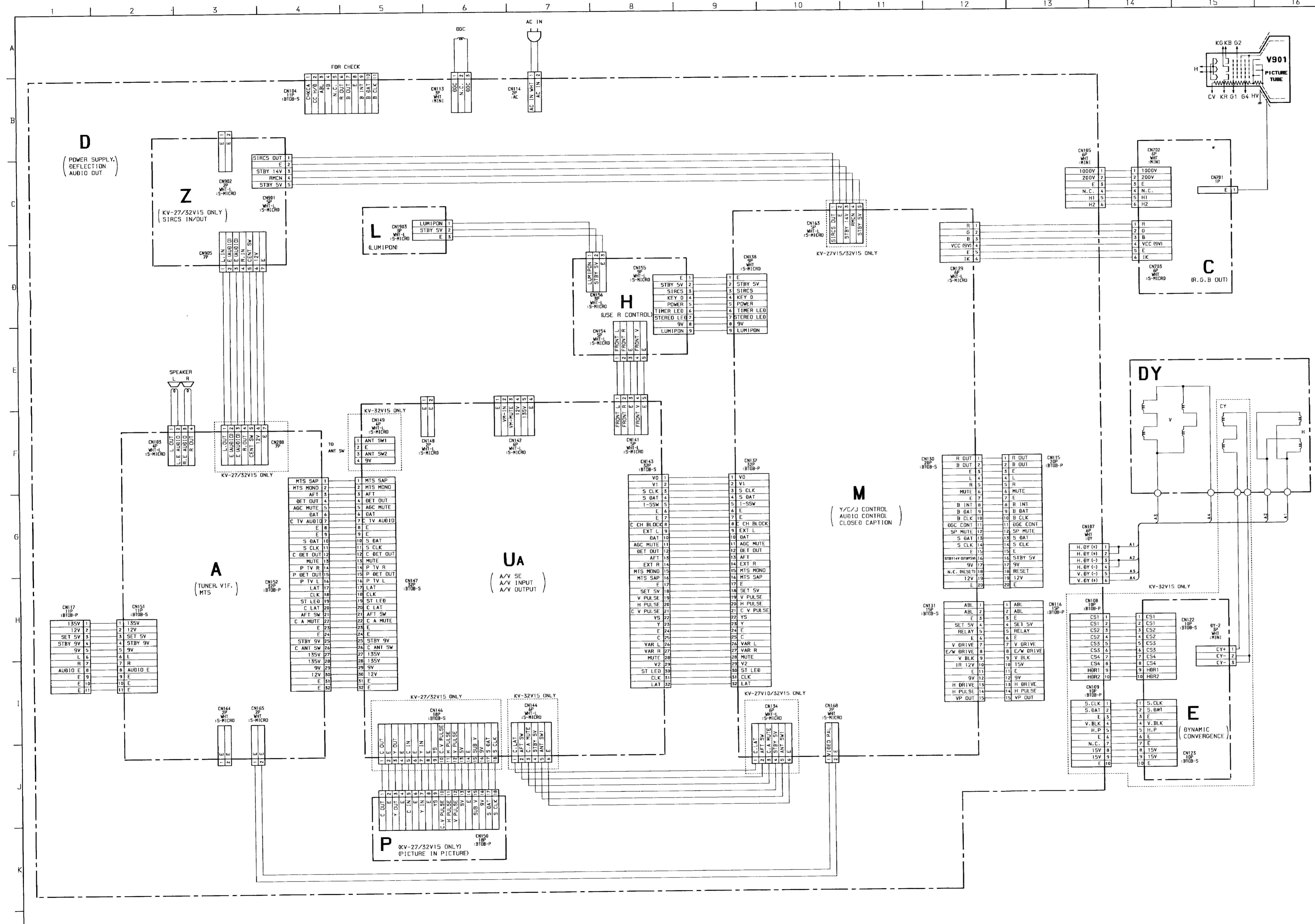
KW
KW

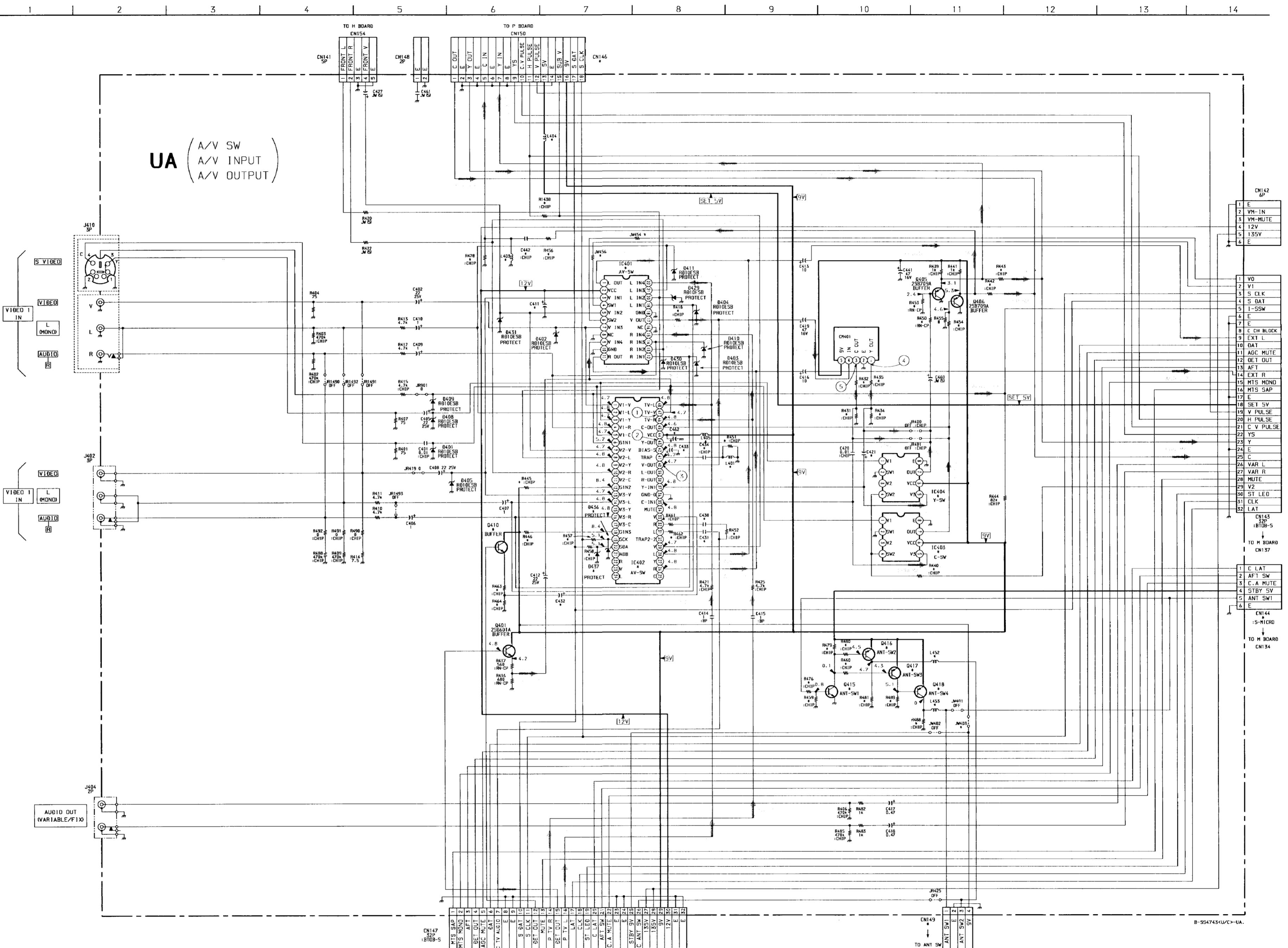
10/27V15
Y117 RM-Y121/RM-CM101
10C/29V10M/32V15
Y-Y117 RM-Y117 RM-Y121
RM-CM101





6-3. FRAME SCHAMATIC DIAGRA





Schematic diagrams

- UA BOARD -

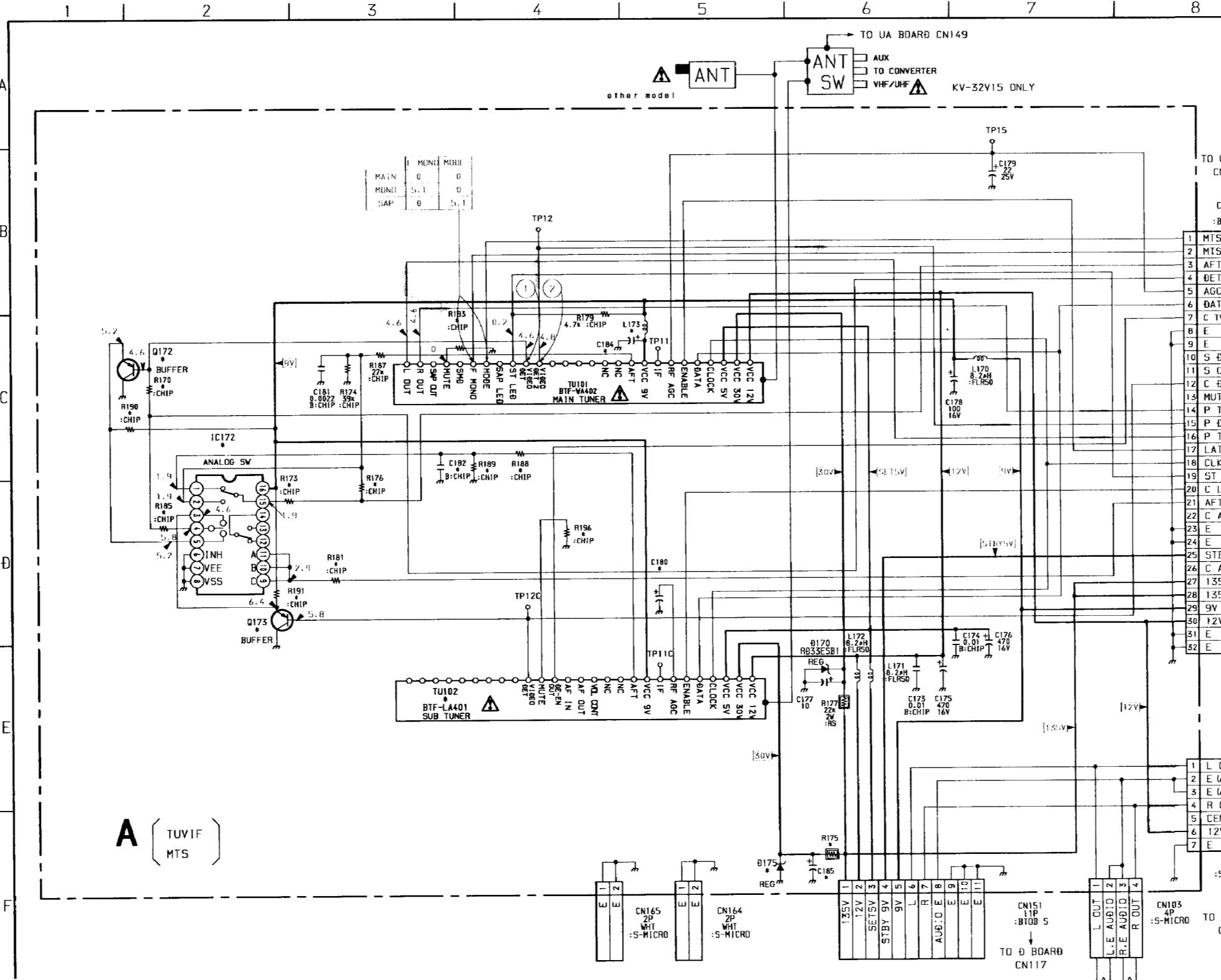
Ref	LOCATION	KV-27V10/27V15 /29V10C/29V10M	KV-32V15
C411	C - 6	100 25V	-
C421	E - 10	0.47	22 25V
C430	F - 8	-	1
C431	F - 8	-	1
C432	F - 7	-	22 25V
C433	E - 8	-	33 25V
C434	E - 8	-	100P
C442	C - 6	-	100P
C462	E - 8	-	100 16V
CN142	C - 14	-	2P
CN144	F - 14	-	6P
CN146	A - 7	-	18P
CN149	K - 11	-	4P
D436	F - 7	-	RD10ESB
D437	F - 7	-	RD10ESB
IC401	C - 7	M52470AP	-
IC402	E - 7	-	CXA1545AS
IC403	F - 10	MM1114XFF	-
IC404	E - 10	MM1118XFF	-
JW403	J - 11	-	10MM
JW454	C - 8	10K	-
JW456	C - 7	10K	-
L401	E - 9	-	18 μ H
L403	C - 6	-	33 μ H
L404	B - 6	-	33 μ H
L405	E - 8	-	JW (5)
L452	I - 10	-	JW (5)
L453	J - 10	-	JW (5)
Q410	F - 6	-	2SD601A
Q415	I - 9	-	2SD601A
Q416	I - 9	-	2SB709A
Q417	I - 10	-	2SB709A
Q418	I - 10	-	2SB709A
R418	D - 8	100	-
R413	D - 10	680	1K
R432	D - 10	680	0
R434	D - 10	680	1K
R435	D - 10	680	0
R440	F - 10	100	-
R442	C - 11	100	-
R443	C - 11	100	-
R445	E - 6	-	10K
R446	F - 6	-	10K
R450	C - 11	100	470
R451	E - 9	-	4.7K
R452	F - 9	-	100
R453	C - 11	1.2K	560
R454	D - 11	100	0
R456	C - 6	-	470
R457	F - 7	-	220
R458	F - 7	-	220
R459	I - 9	-	22K
R460	I - 9	-	330
R461	F - 8	-	4.7K
R462	F - 8	-	4.7K
R463	F - 6	-	680
R464	G - 6	-	680
R476	I - 9	-	22K
R478	C - 6	-	470
R479	I - 9	-	22K
R480	I - 9	-	22K
R481	I - 10	-	22K
R488	I - 10	-	22K
R489	I - 10	-	22K
R1438	C - 6	-	22K

- NOT MOUNT

- A BOARD -

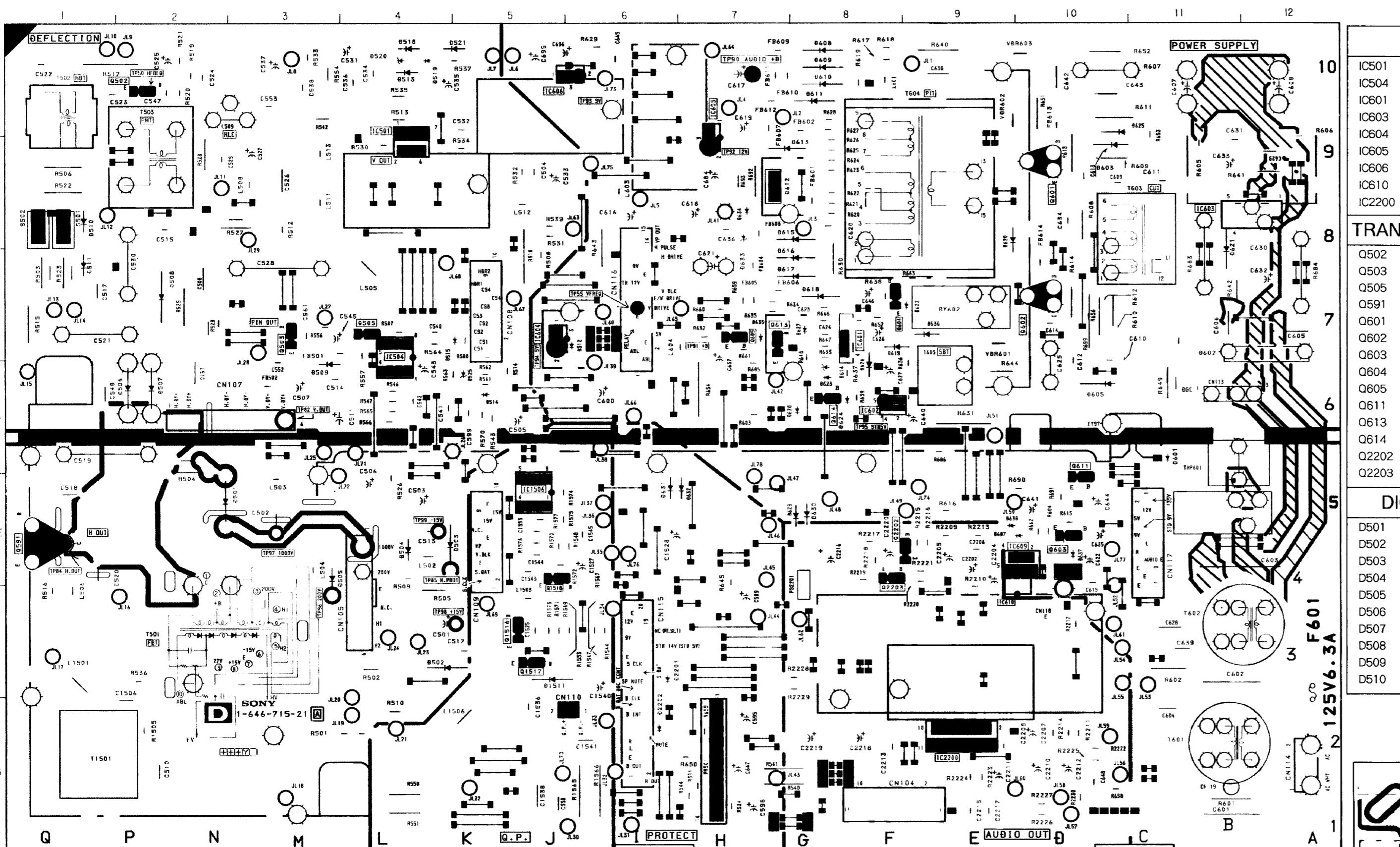
Ref	LOCATION	KV-27V10/27V15 /29V10C/29V10M	KV-32V15
C180	D - 5	-	22MF / 25V
C182	D - 3	-	0.0022MF
C184	D - 5	-	10MF / 50V
C185	F - 6	-	10MF / 50V
CN208	F - 8	7P	-
D175	F - 5	-	RD33ESB1
IC172	D - 2	-	BU4053BF
L173	C - 5	-	8.2 μ H
Q172	C - 2	-	2SA1162-G
Q173	D - 2	-	2SA1162-G
R170	C - 2	100 1/10W	-
R173	D - 3	-	0 1/10W
R175	F - 6	-	22K 2W
R176	D - 3	0 1/10W	-
R181	D - 3	-	100 1/10W
R185	D - 4	-	39K 1/10W
R188	D - 4	-	27K 1/10W
R190	C - 2	-	4.7K 1/10W
R191	D - 3	-	4.7K 1/10W
R193	C - 3	-	330 1/10W
R196	D - 4	-	330 1/10W
TU102	E - 4	-	BTF-LA401

- NOT MOUNT

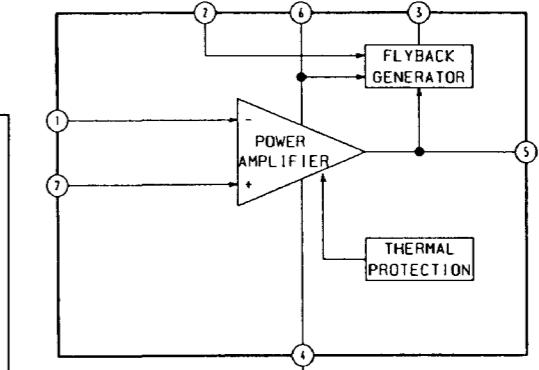


D POWER SUPPLY,
DEFLECTION,
AUDIO OUT

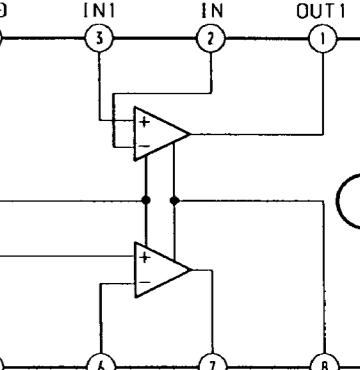
– D BOARD – **Conductor Side**



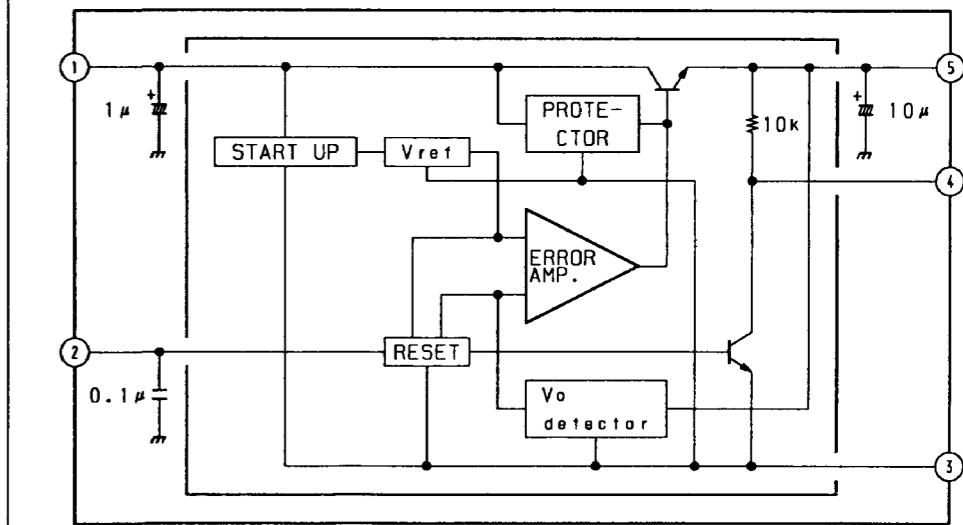
• D Board IC501 TDA8172



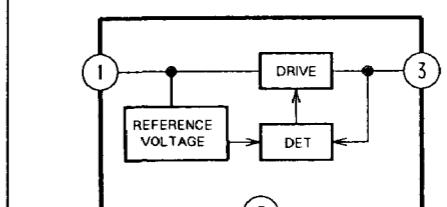
D Board IC504 μ PC393C



8 • D Board IC602 L78LR05D



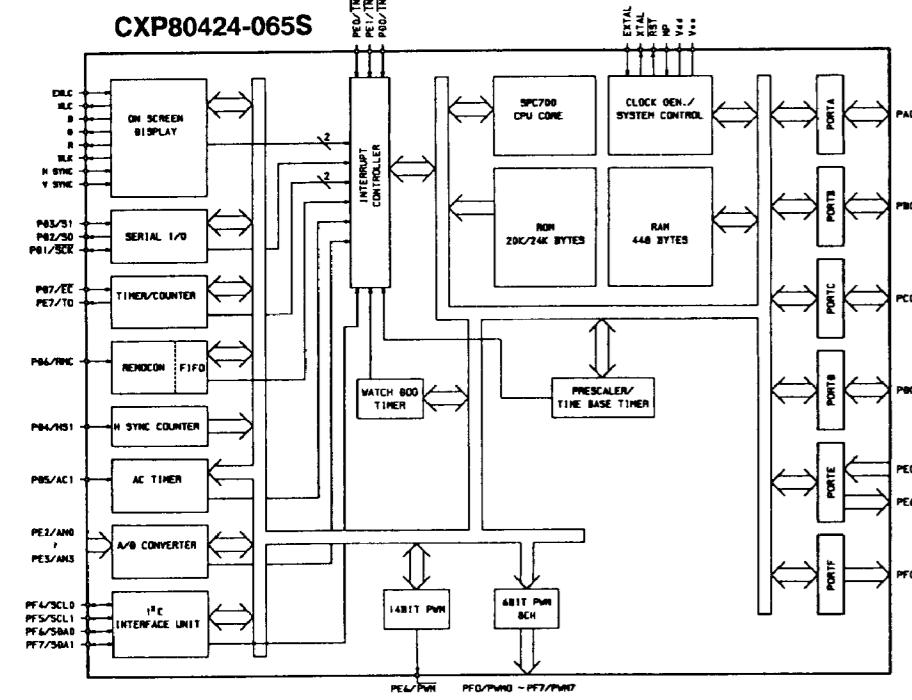
• D Board IC610 μ PC78L05J



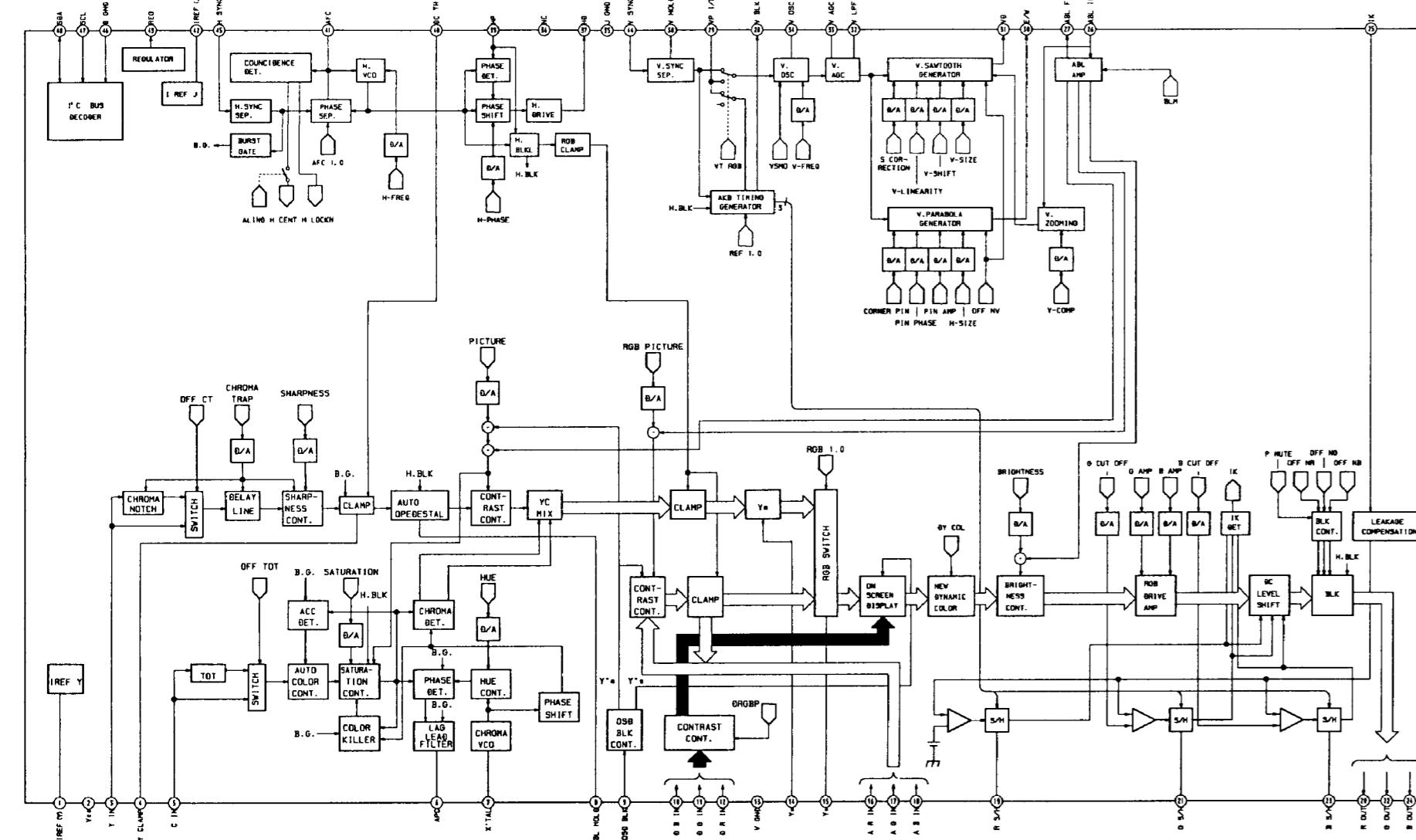
2015

NOTE: The circuit indicated as left contains high voltage of over 100 Vp-p. Care must be paid to prevent an electric shock in connection or repairing.

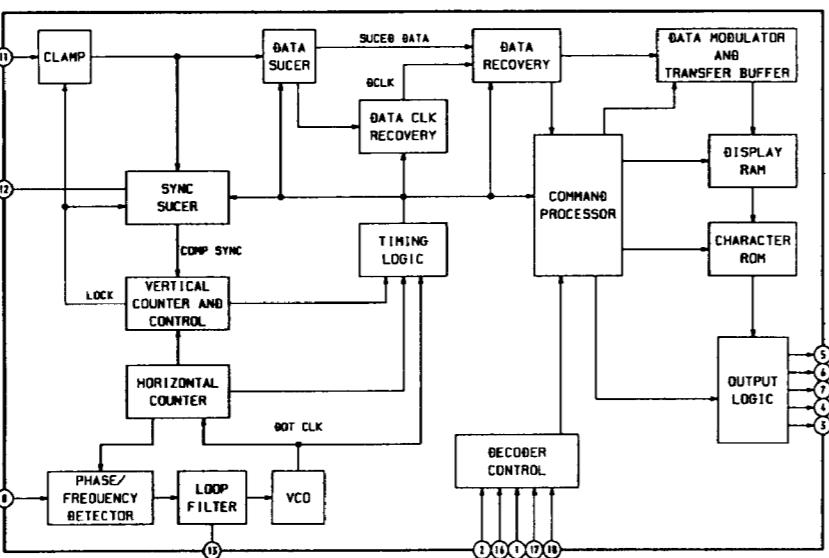
- M Board IC101



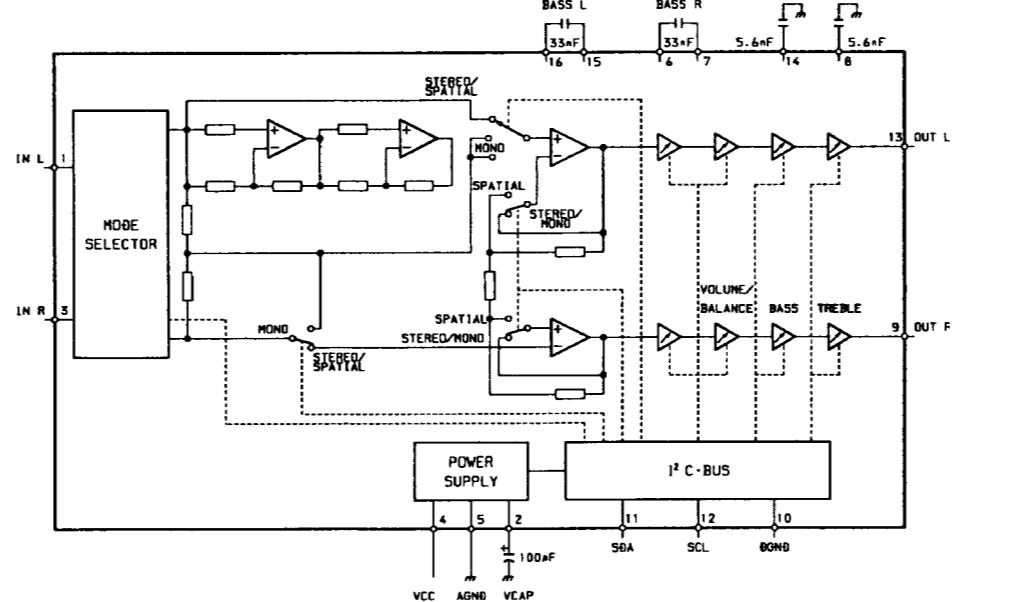
- M Board IC301 CXA1468AS



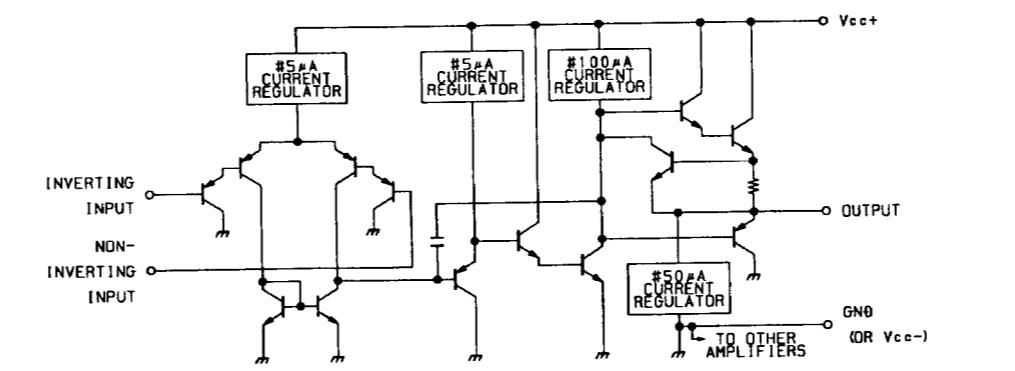
• M Board IC150 MC144143



- M Board IC201 TDA8424



- M Board IC202 LM358PS-

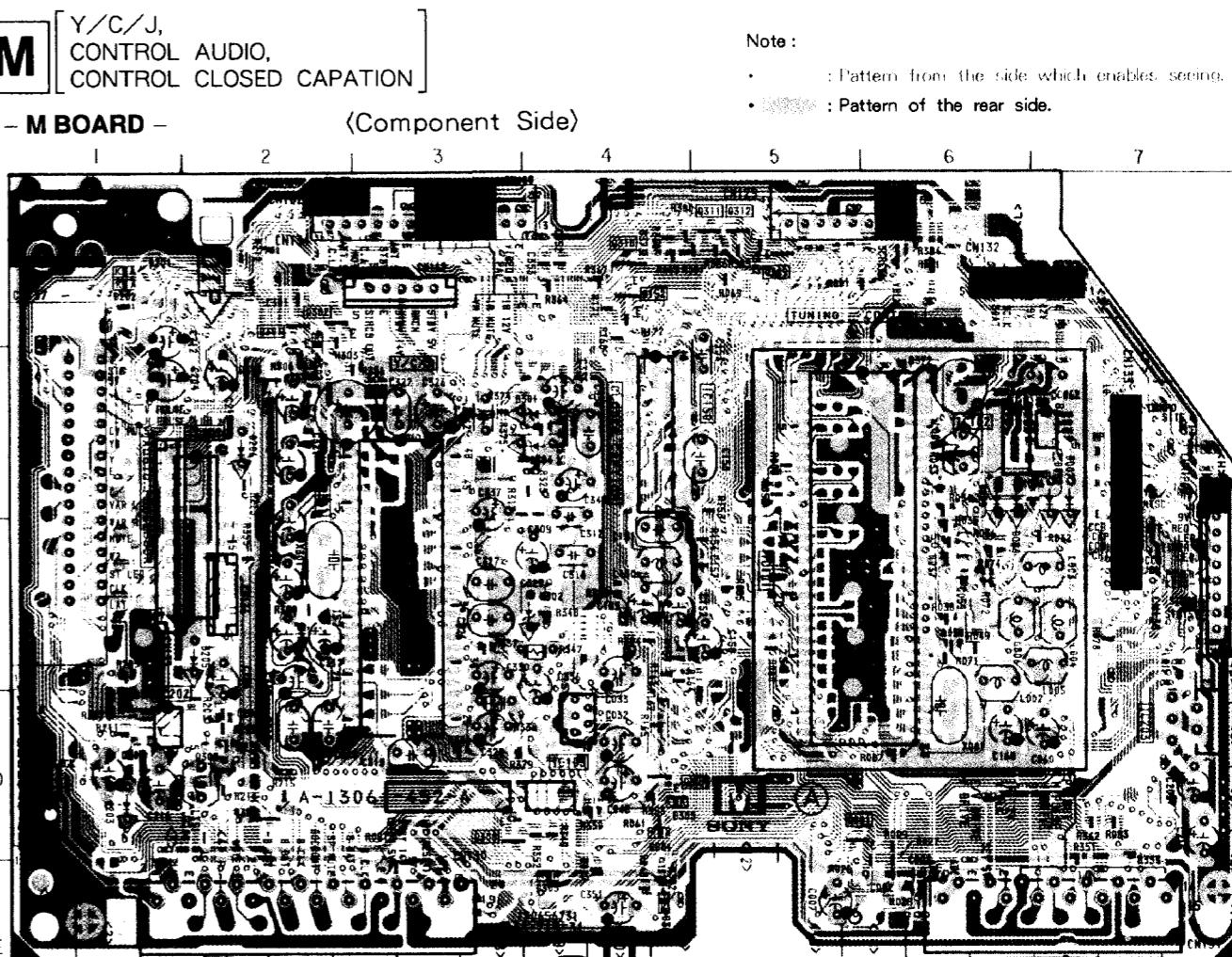


KV-27V10/27V15 RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15 RM-Y117 RM-Y117 RM-Y121 RM-CM101

KV-27V10/27V15 RM-Y117 RM-Y121/RM-CM101	KV-27V10/27V15 RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15 RM-Y117 RM-Y117 RM-Y121 RM-CM101	KV-29V10C/29V10M RM-Y117 RM-Y117

KV-27V10/27V15
RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15
RM-Y117 RM-Y117 RM-Y121
RM-CM101

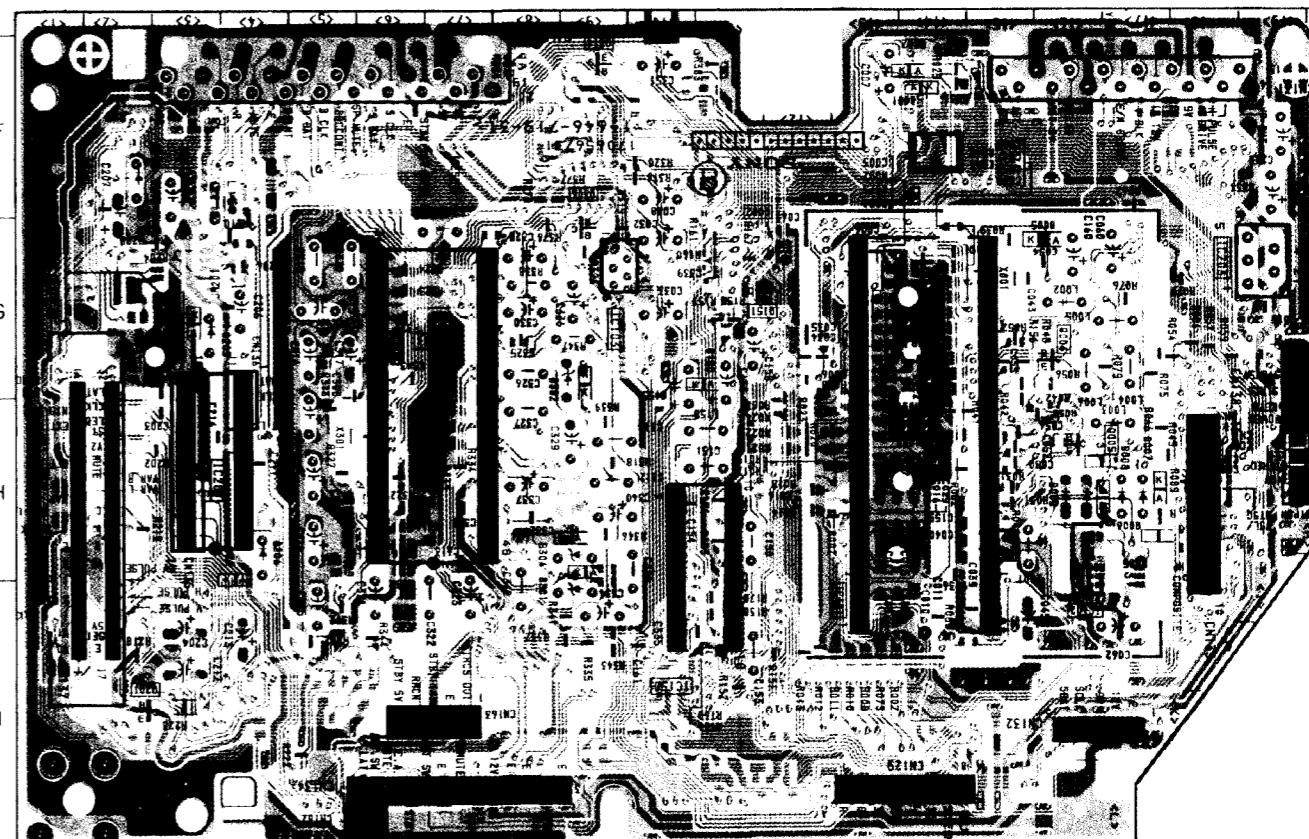
ote :
: Pattern from the side which enables seeing.
: Pattern of the rear side.

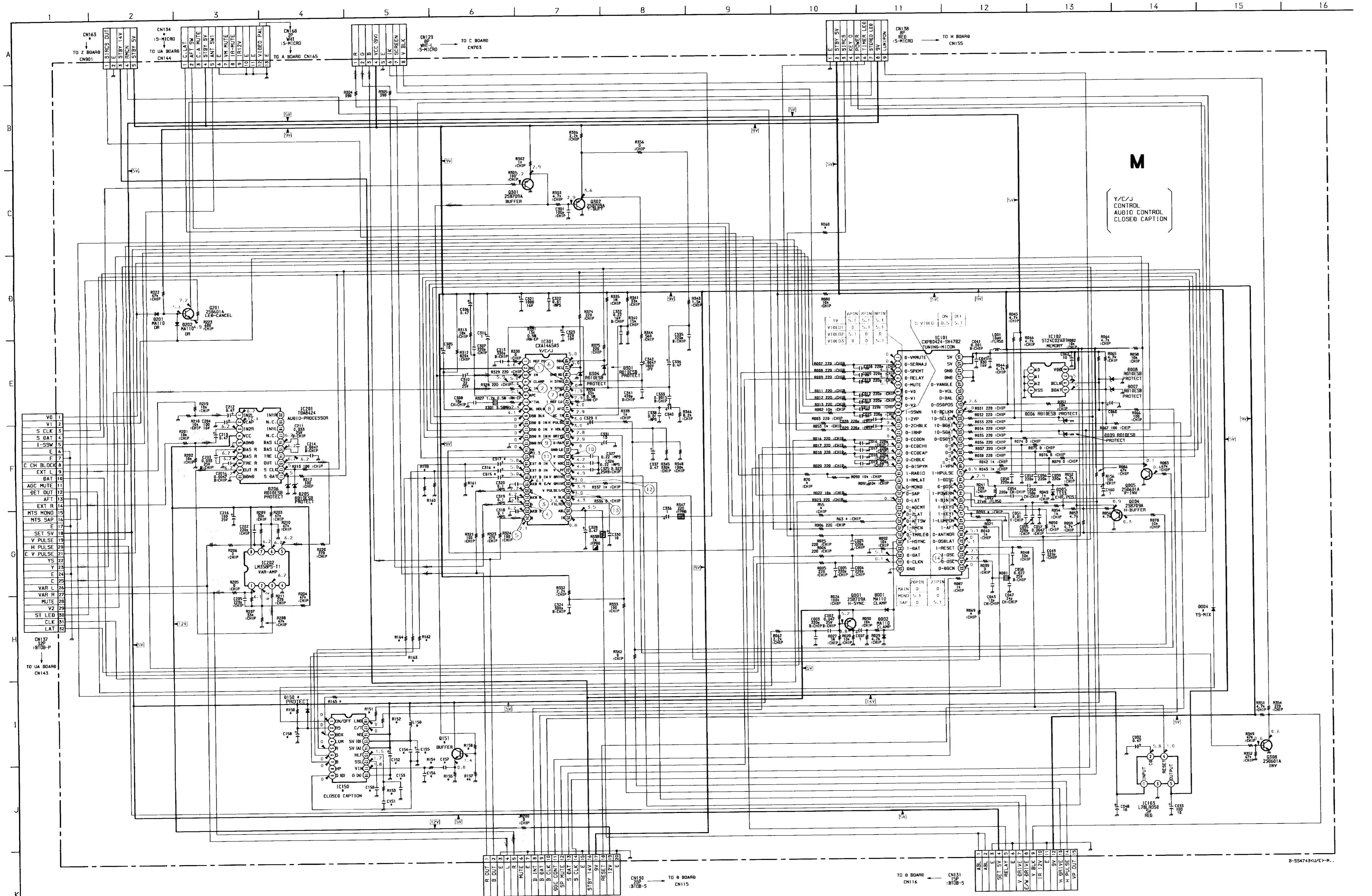


ponent Side)

ponent Side

IC	DIODE
IC101 C - 6, H - 6	D001 F - 5
IC102 B - 6, H - 6	D002 F - 5
IC103 D - 4, G - 4	D004 D - 4
IC150 B - 4, H - 4	D005 G - 6
IC201 B - 2, H - 2	D006 B - 6, H - 6
IC202 D - 1	D007 B - 7, H - 7
IC301 B - 3, G - 3	D008 B - 7, H - 7
TRANSISTOR	
Q001 D - 6	D009 B - 6, H - 6
Q004 G - 6	D150 G - 4
Q005 H - 6	D201 A - 1
Q151 G - 5	D202 A - 1
Q201 I - 1	D205 C - 2, G - 2
Q301 A - 2	D206 B - 2, H - 2
Q302 A - 2	D301 B - 4, H - 4
Q308 D - 3	D304 B - 4, H - 4



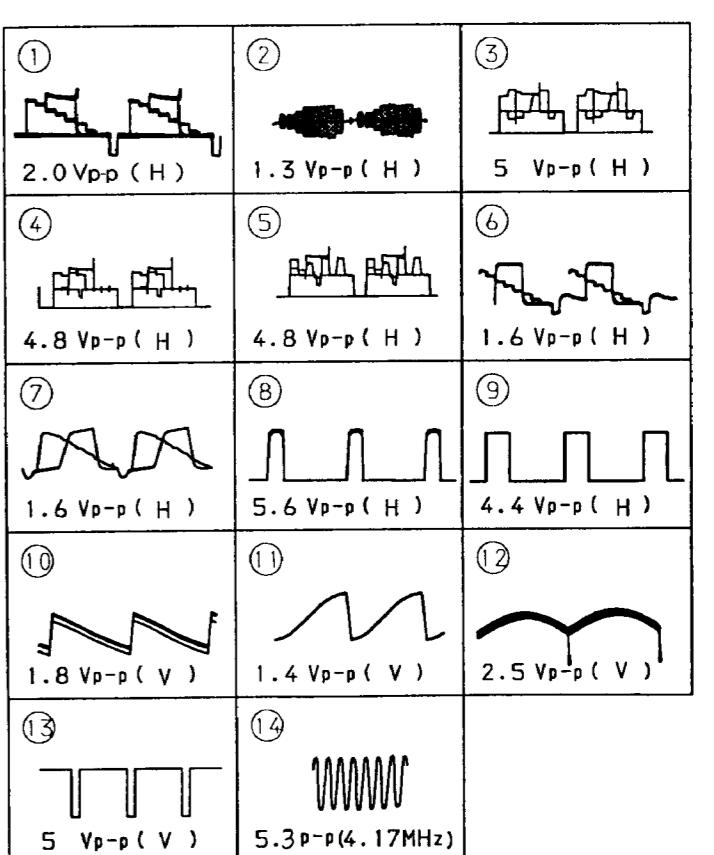


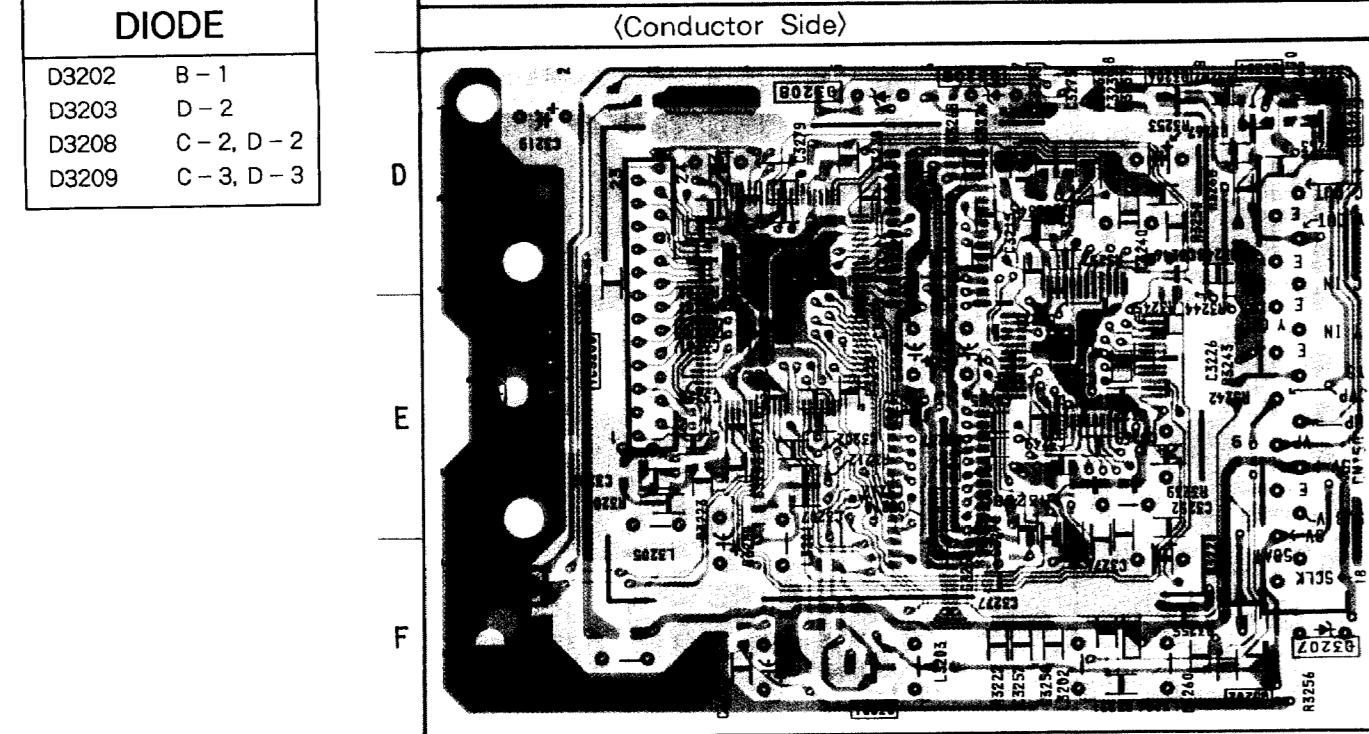
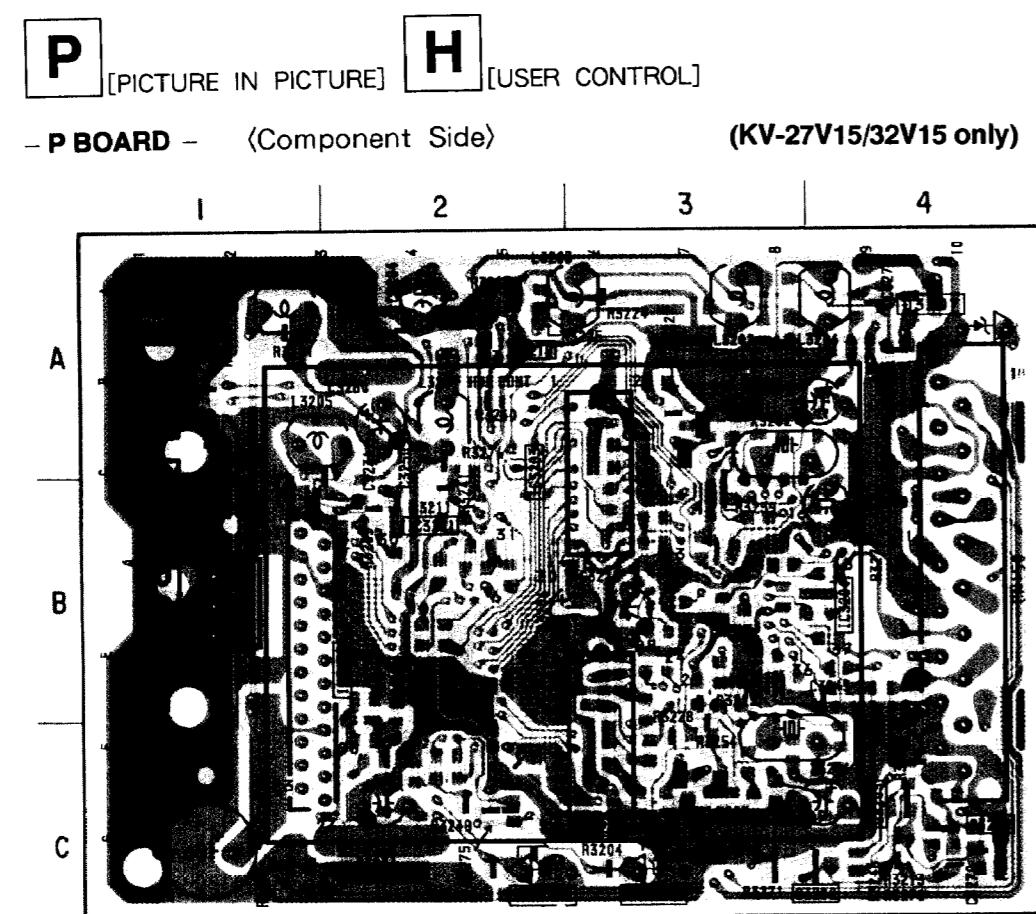
M BOARD —

Ref	LOCATION	KV-27V10/ 27V15/32V15	KV-29V10C/ 10M
C150	J - 5	0.1	—
C151	J - 5	0.0068	—
C152	I - 5	10	—
C153	I - 5	0.0033	—
C154	I - 5	0.1 /25V	—
C155	I - 5	10	—
C156	I - 6	560P	—
C157	I - 6	0.1 / 25V	—
C158	I - 4	1	—
C315	F - 6	10	—
C316	F - 6	10	—
C317	F - 6	10	—
CN134	A - 3	6P	—
CN163	A - 2	5P	—
D004	G - 15	MA110	—
D150	H - 4	MA110	—
IC150	I - 4	MC144143	—
L150	I - 5	10 μ H	—
Q151	I - 6	2SD601A	—
R055	F - 10	220	—
R060	C - 10	18K	0
R063	F - 10	220	—
R069	G - 12	220	—
R070	F - 10	1K	—
R090	F - 10	—	—
R150	H - 4	100K	—
R151	I - 5	1K	—
R152	I - 5	1K	—
R153	I - 5	6.8K	—
R154	I - 5	470	—
R155	I - 6	1K	—
R157	I - 6	10K	—
R158	I - 6	10K	—
R159	F - 5	1K	—
R160	F - 5	1K	—
R161	F - 6	1K	—
R162	G - 5	4.7K	—
R163	H - 5	4.7K	—
R164	H - 5	4.7K	—
R165	H - 4	4.7K	—
R166	I - 4	1K	—
R168	I - 4	1K	—

— : NOT MOUNT

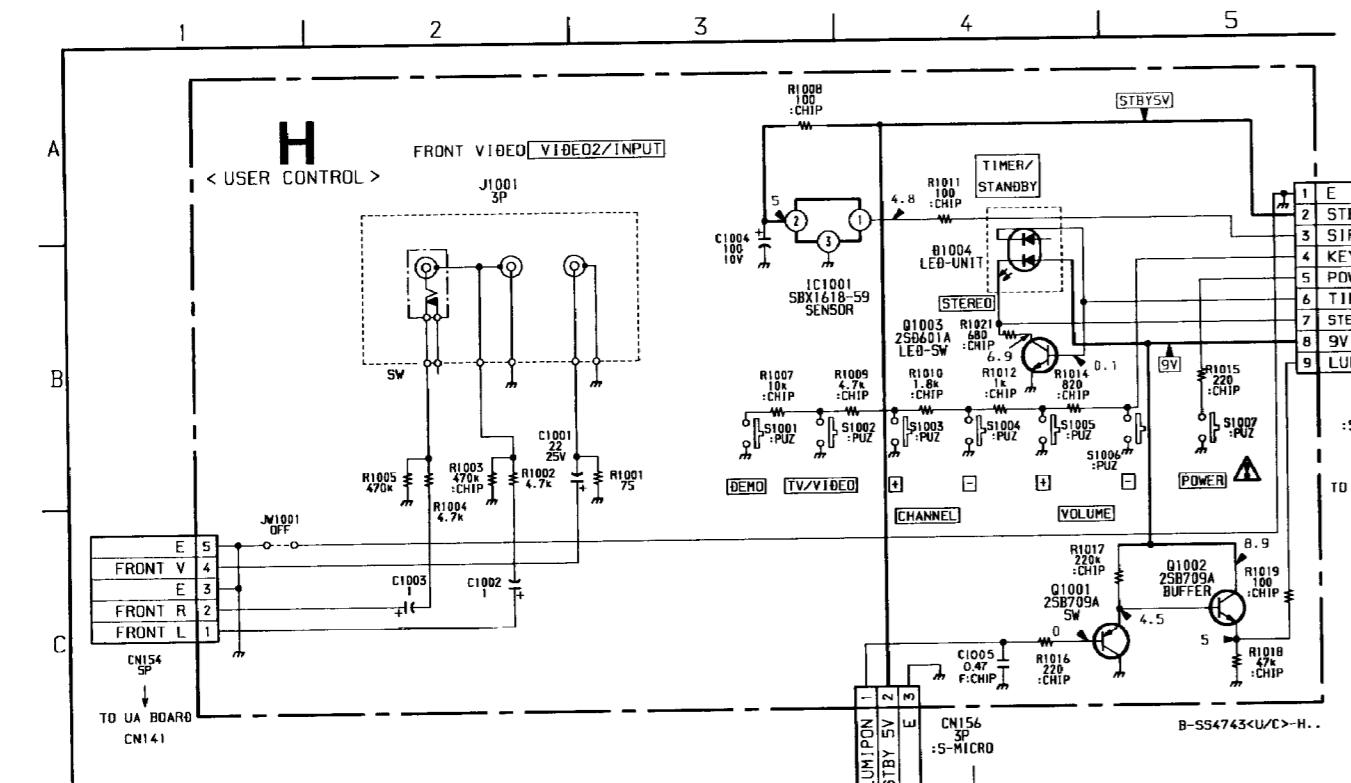
• M BOARD WAVEFORMS



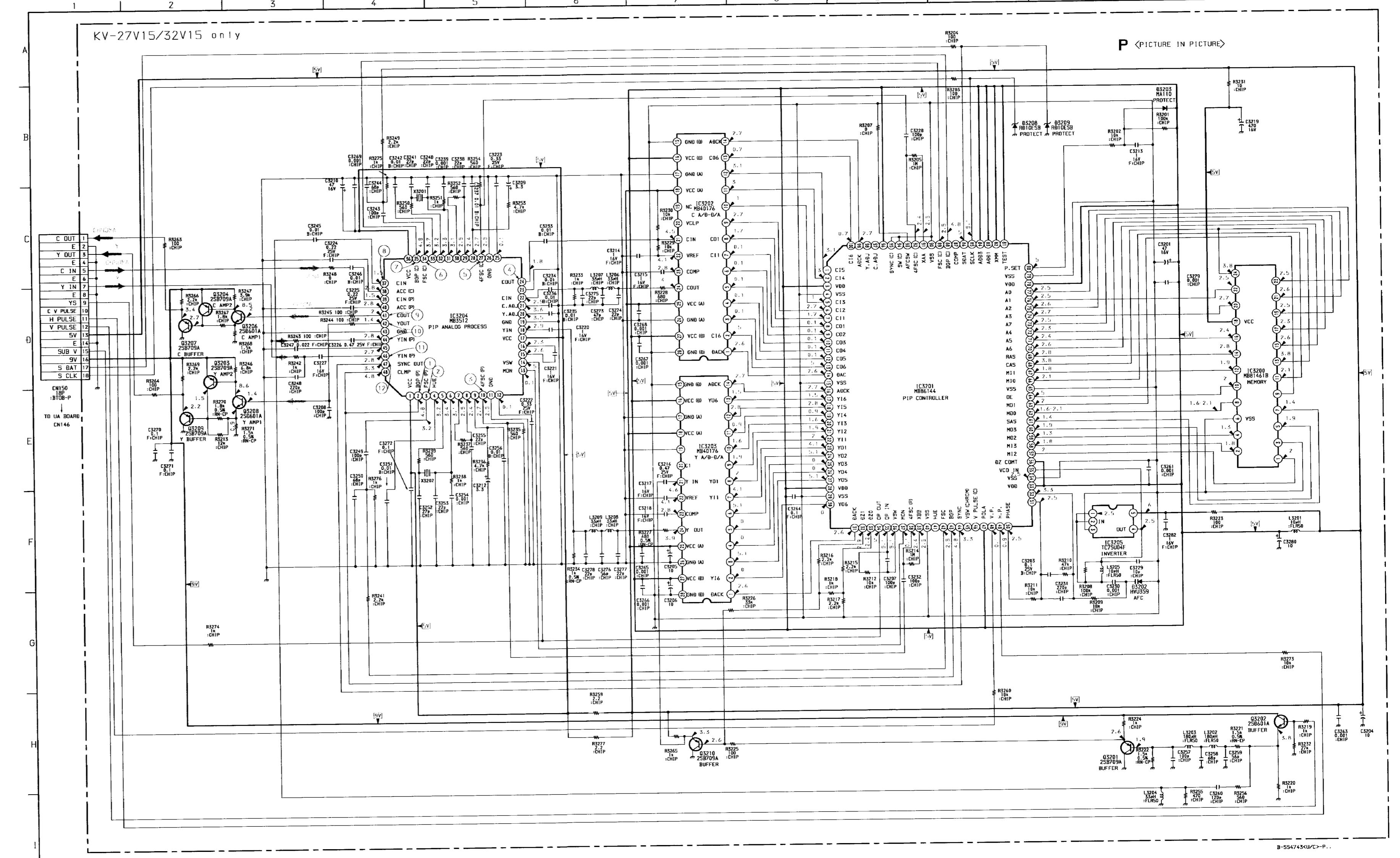


Note :

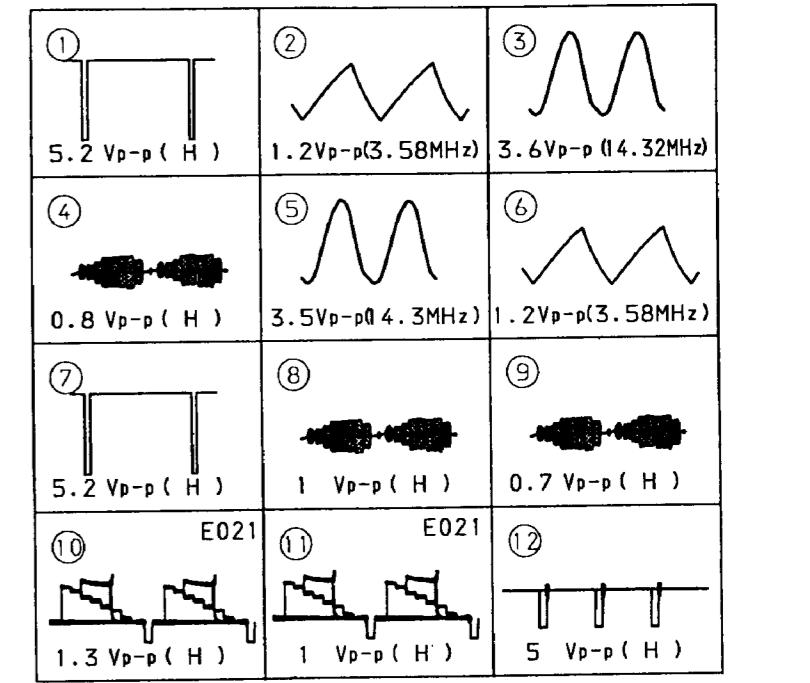
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.



(KV-27V15/32V15 only)



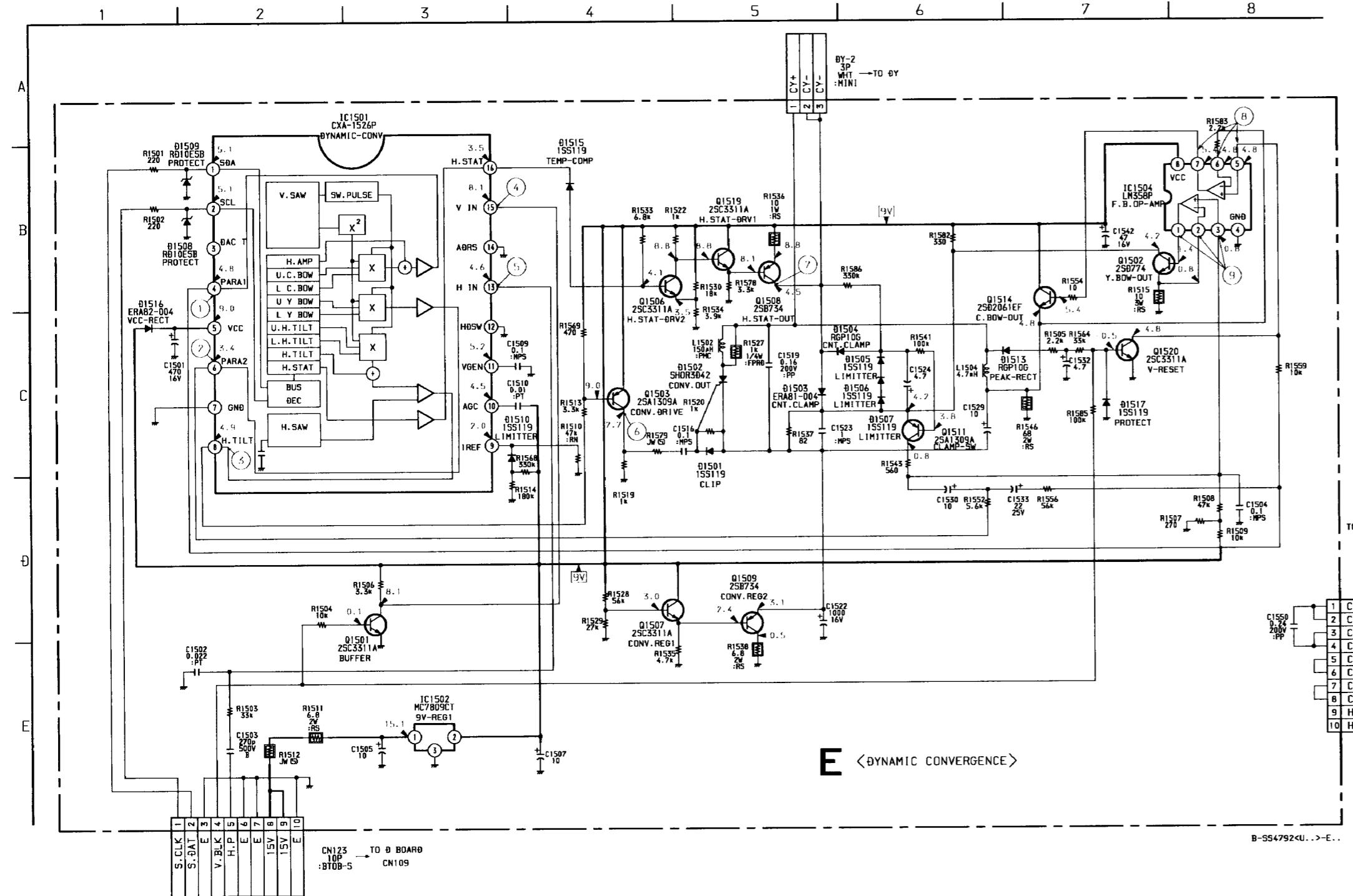
- P BOARD WAVEFORMS



Schematic diagrams

Schematic diagram

(KV-32V15 only)

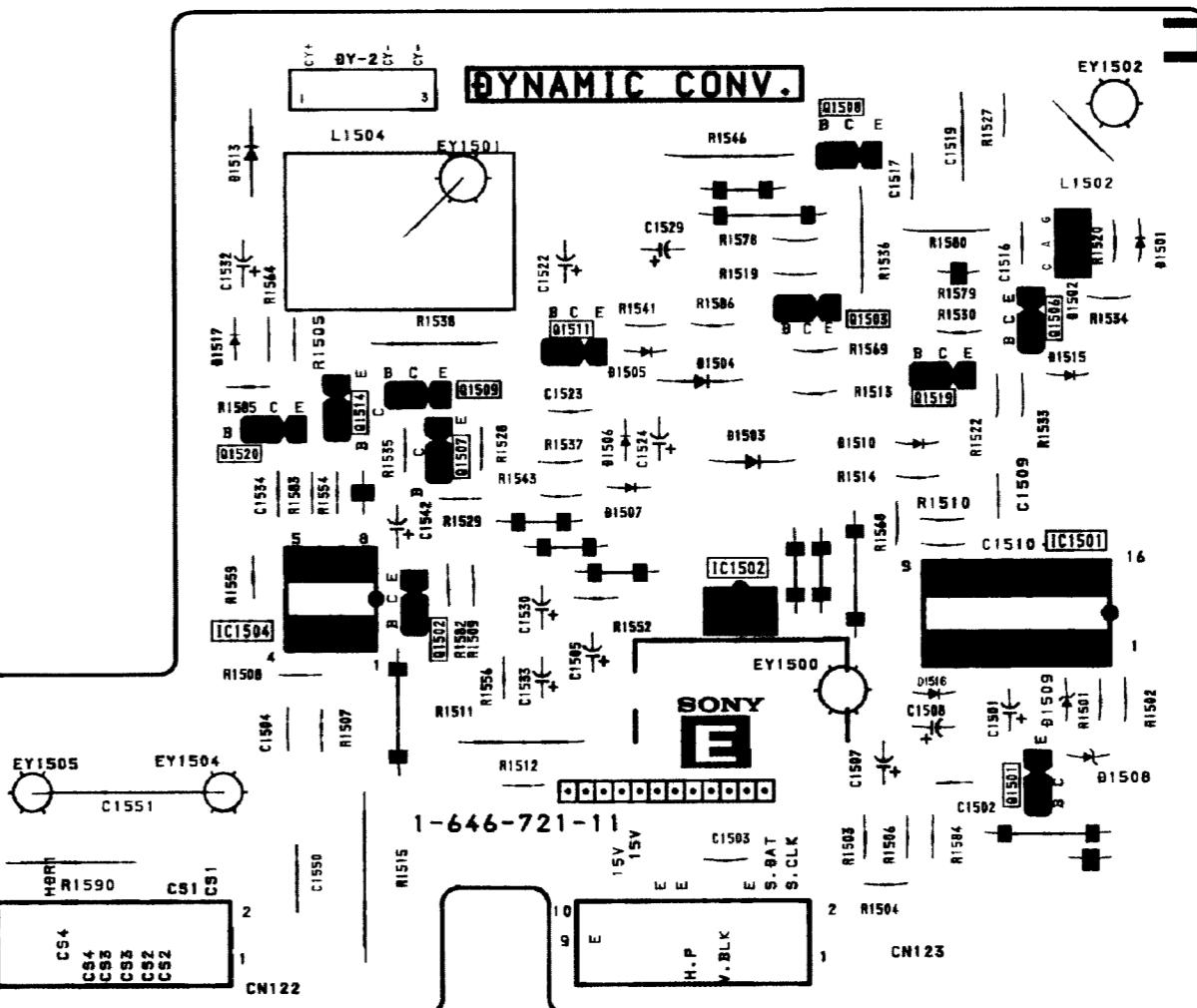


E **(DYNAMIC CONVERGENCE)**

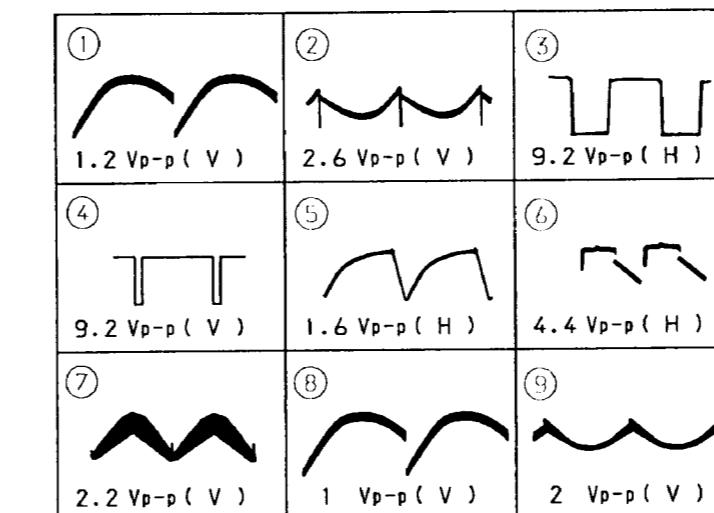
E [DYNAMIC CONVERGENCE]

- E BOARD - <Conductor Side>

(KV-32V15 only)



- E BOARD WAVEFORMS



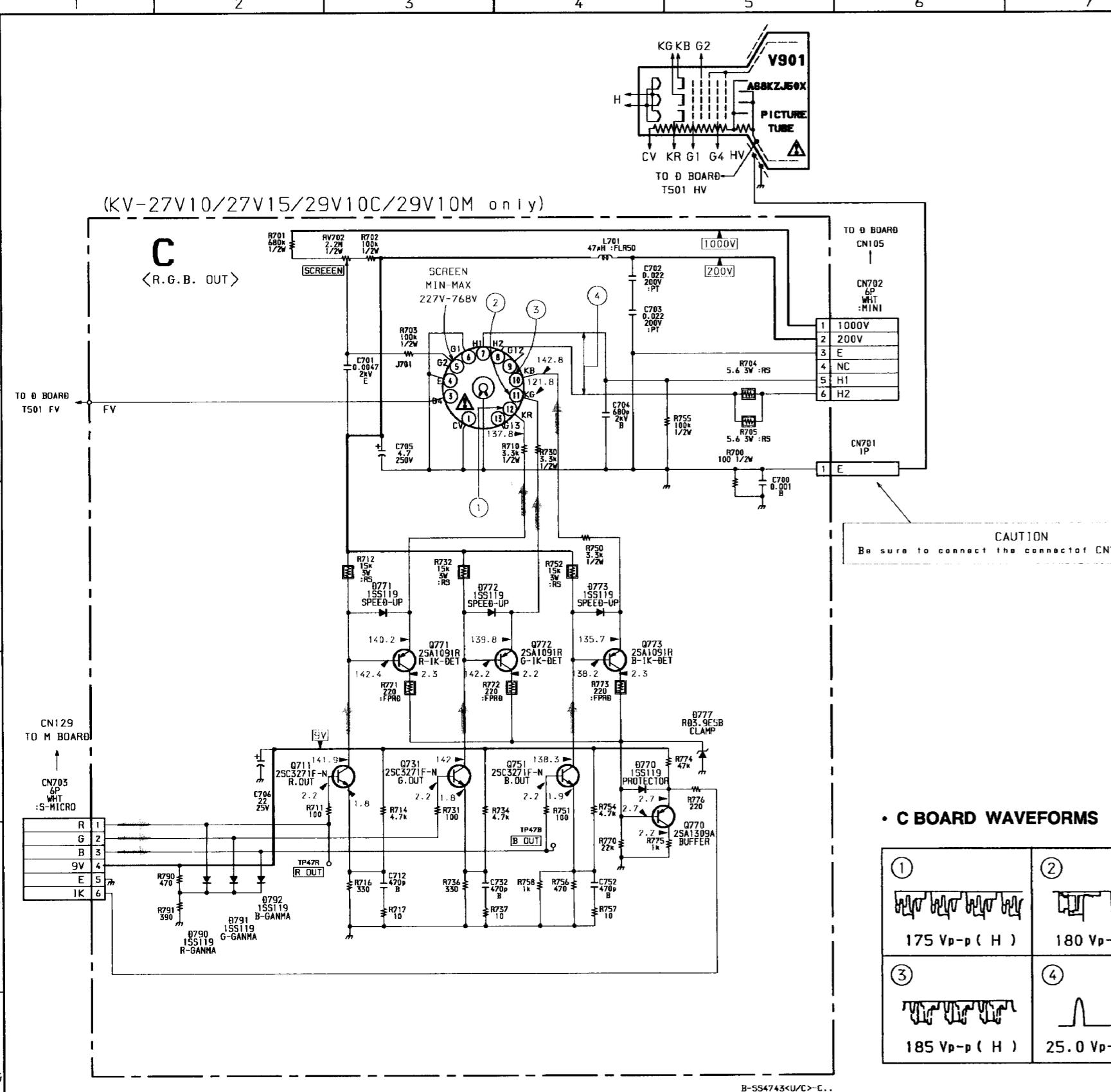
Schematic diagrams

← **E** board

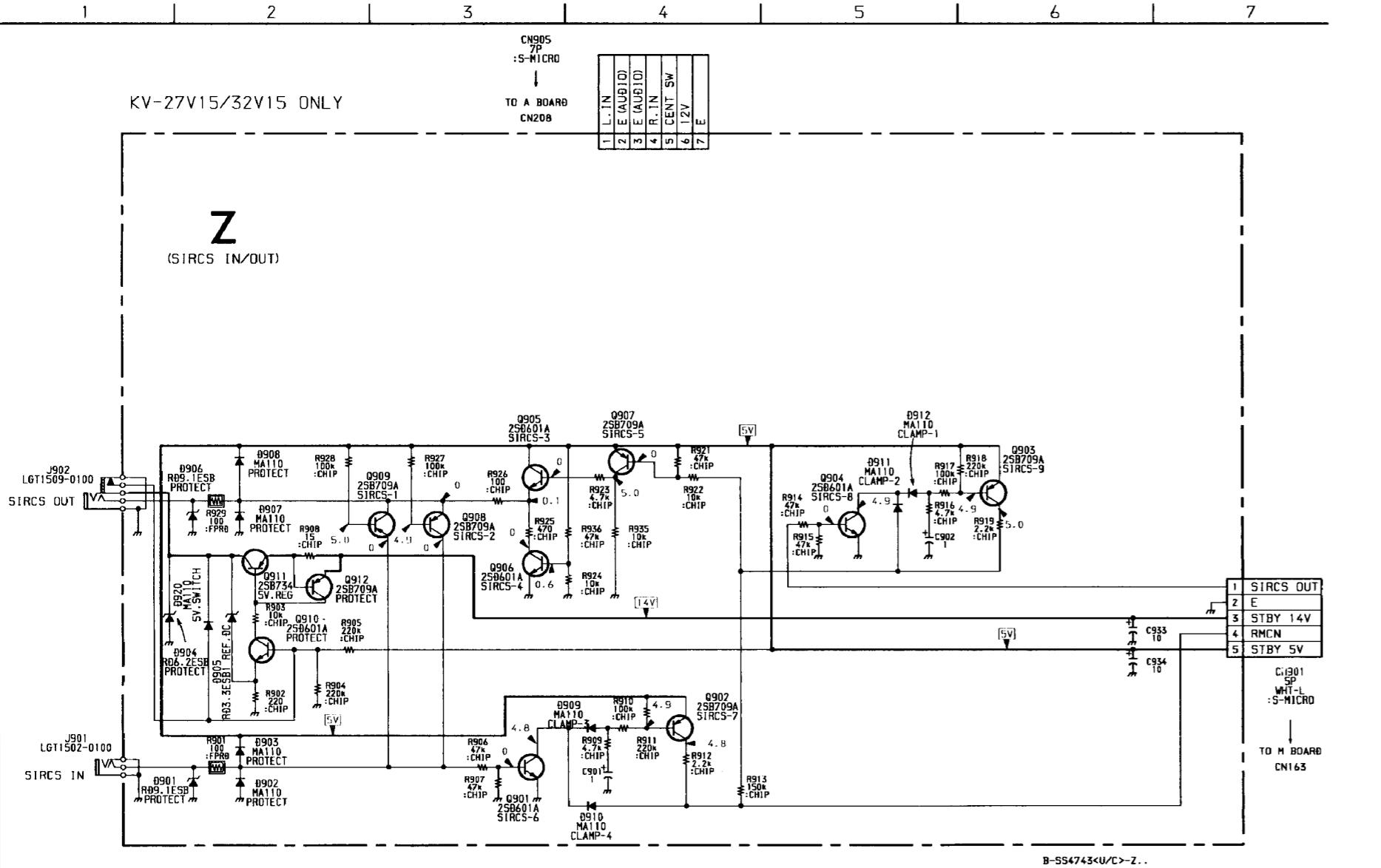
Schematic diagrams

C board

(KV-27V10/27V15/29V10C/29V10M only)

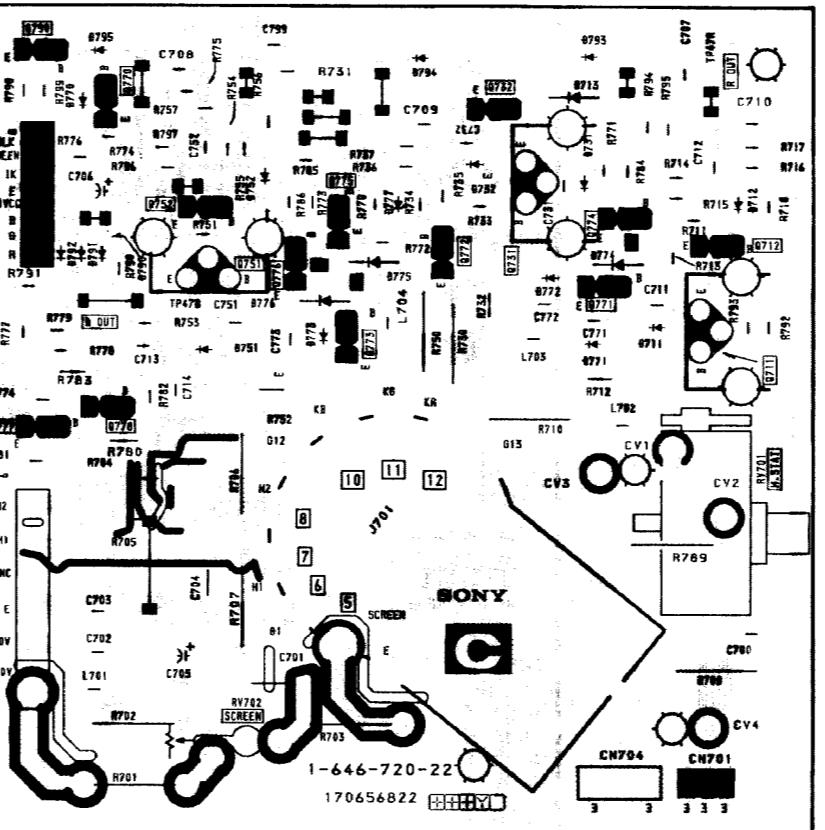


(KV-27V15/32V15 only)



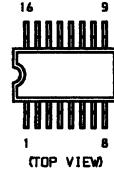
C [R. G. B. OUT] **Z** [SIRCS IN/OUT] **L** [LUMIPON]

C BOARD - (KV-32V15 only) **(Conductor Side)**

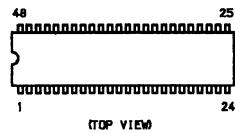


6-5. SEMICONDUCTORS

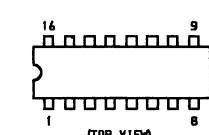
BU4053BF
CXA1315M



CXA1213BS
CXA1465AS
CXA1545AS



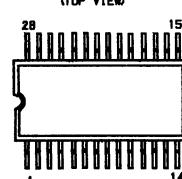
CXA1526P
MB40176PF-G-BND-EF



CXP80424-SV4782
CXP80424-SV4789
CXP85228-SV4745



CXP80424-077S

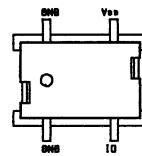


DM-48
PM-38
PM-39

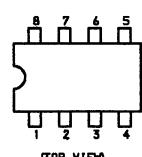


MARKING SIDE VIEW

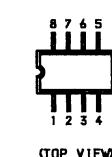
1S4555



LM358P
ST24C02AB1
ST24C01B1
μPC358C
μPC393C
24C02A1/P



LM358PS
MM1114XFF
MM1118XFF



LM7805CT
LM7812CT
MC7809CT
NJM78M09FA
NJM7812FA

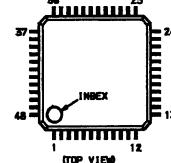


L78LR05D-MA



L78LR05D-MA

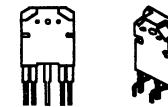
MB3512PFQ-G-BND-EF



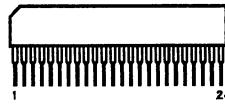
SI-3120C



STR81159A



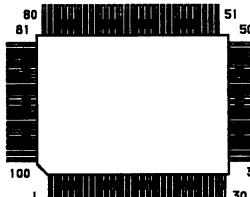
MB81461B-12RS-PSZ



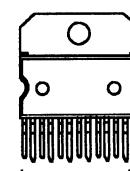
TC7SU04F



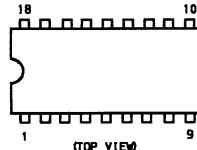
MB86144BPF-G-BND



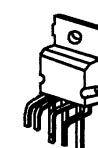
TDA2009A
TDA7262



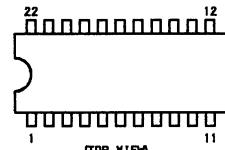
MC144143P1



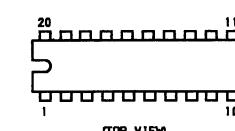
TDA8172



M52470AP
M52470P



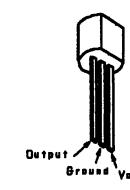
TDA8424



NJM78L05A



μPC78L05J



SBX1618-H9
SBX1618-51

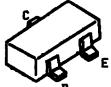


Output
Ground
Vcc

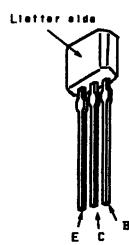
2SA1091-0
2SA1091-R
2SC2551-0



2SA1162G
2SB709A
2SD601A



2SA1175-HFE
2SA1309A
2SC2785-HFE
2SC3311A



2SA1306A-Y



2SB1370-EF
2SC3298A-Y
2SC4159-E
2SC4793
2SD2012
2SD2061



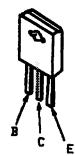
2SB733
2SB734
2SC3733
2SD774



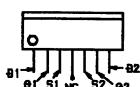
2SC2611
2SC2688-LK
2SC3271F-N



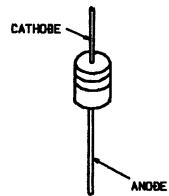
2SC4834MNP



2SC4927-01
2SC4927-02



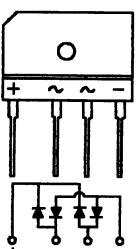
Ø1NS4
Ø1N20R
ERA82-004TP
ERA83-006
ERA85-009
RØ10ESB
RØ10ESB1
RØ10ESB2
RØ12ESB3
RØ13ESB2
RØ3.3ESB2
RØ3.9ESB2
RØ33ESB1
RØ39ESB4
RØ5.1ESB
RØ5.1ESB1
RØ6.2ESB2
RØ8.2ESB3
RØ9.1ESB1
RØ9.1ESL
1SS119



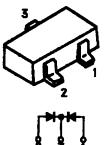
Ø2S4MF
Ø2S4MTA1



Ø4SB60L

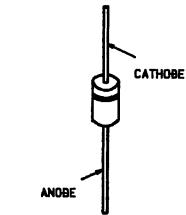


Ø5SC4M

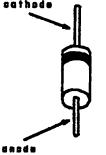


EGP20G
EL1Z
GP08Ø
RGP02-17EL-6433
RGP10GPKG3
RGP10GPKG23
1SS83

ERA81-004
ERA83-006
ERC06-15S
S2L20UF
S3V10SS



ERØ29-08J



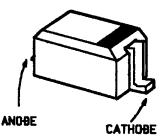
ES1F-LF-G2



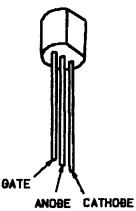
GP08ØPKG3



HVU359TRF
MA110
1T33



SHØR3Ø42



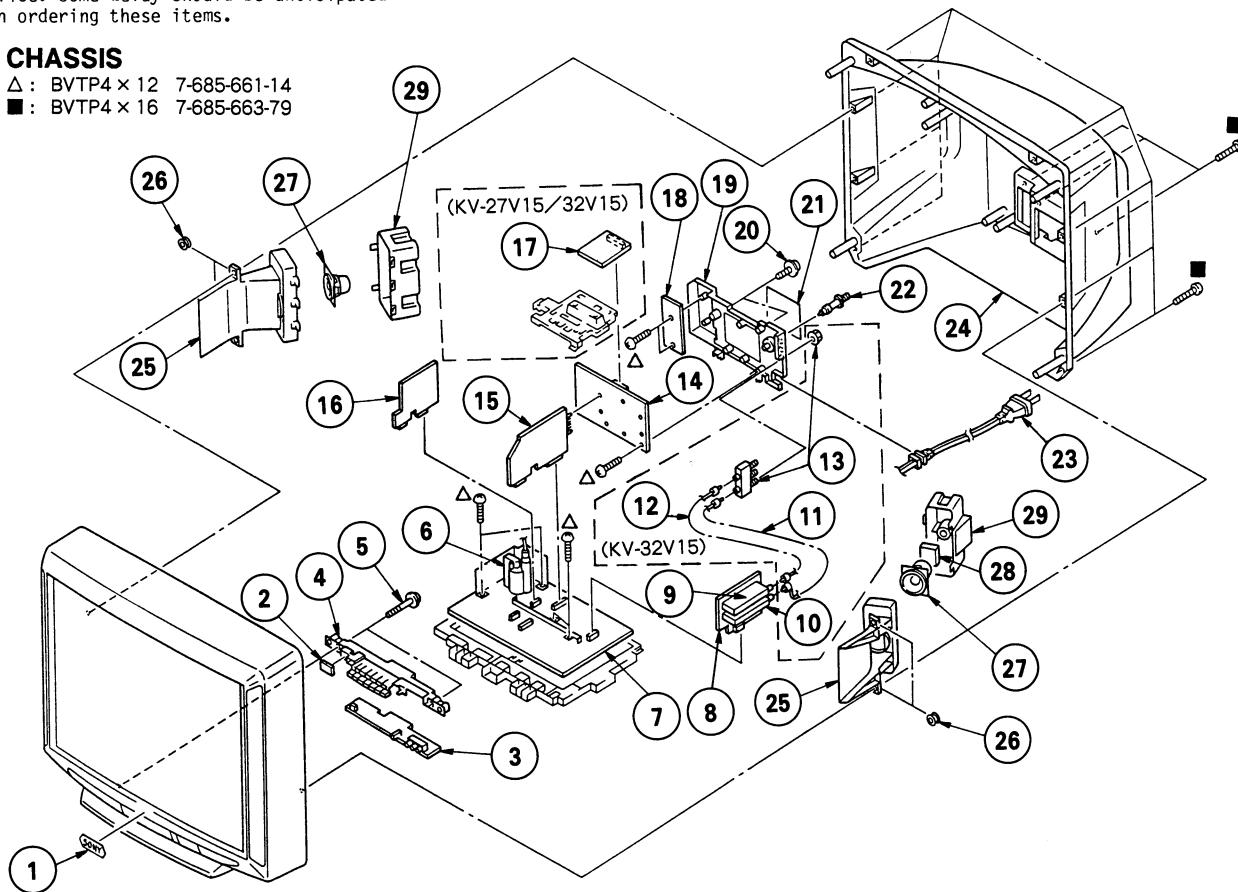
SECTION 7 EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

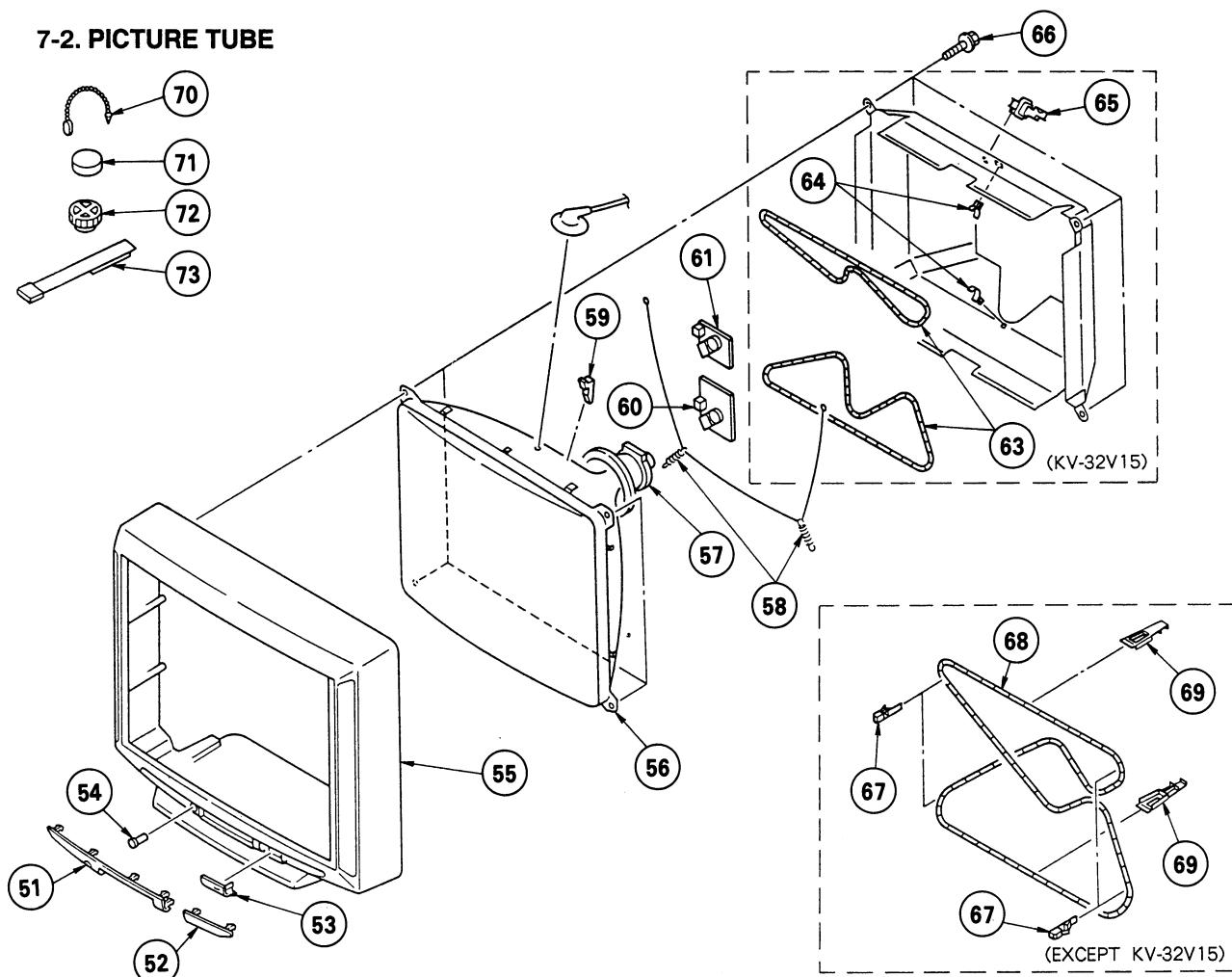
7-1. CHASSIS

△: BVTP4 x 12 7-685-661-14
 ■: BVTP4 x 16 7-685-663-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-394-048-01	EMBLEM (NO.9), SONY		16	*A-1341-622-A	E BOARD, COMPLETE (KV-32V15)	
2	*1-651-245-11	L BOARD		17	*A-1195-062-A	P BOARD, COMPLETE (KV-27V15/32V15)	
3	*1-646-717-11	H BOARD		18	A-1390-411-A	Z BOARD, COMPLETE (KV-27V15/32V15)	
4	4-043-580-01	BUTTON, MULTI		19	4-039-517-11	PANEL, ANTENNA TERMINAL (KV-32V15)	
5	4-319-520-11	SCREW, SPECIAL (+PW4X30)		4-039-524-21		PANEL, ANTENNA TERMINAL (KV-27V15)	
6	△ 1-453-416-11	TRANSFORMER ASSY, FLYBACK (NX-2604A3)		4-039-524-31		PANEL, ANTENNA TERMINAL (KV-27V10/29V10C/29V10M)	
7	*A-1346-192-A	D BOARD, COMPLETE (KV-27V10/29V10M)		20	4-382-854-11	SCREW (M3X10), P, SW (+)	
	*A-1346-199-A	D BOARD, COMPLETE (KV-29V10C)		21	4-039-834-01	LABEL, TERMINAL	
	*A-1346-200-A	D BOARD, COMPLETE (KV-27V15)		22	1-573-657-11	PLAUG, F-PIN (KV-27V10/27V15/29V10C/29V10M)	
	*A-1346-201-A	D BOARD, COMPLETE (KV-32V15)		23	△ 1-751-056-11	CORD, POWER (WITH CONNECTOR) 6A/250V (KV-29V10C)	
8	*A-1297-221-A	A BOARD, COMPLETE (KV-27V10/27V15/29V10C/29V10M)		△ 1-751-059-11		CORD, POWER (WITH CONNECTOR) 10A/125V (KV-27V10/27V15/29V10M/32V15)	
	*A-1297-233-A	A BOARD, COMPLETE (KV-32V15)		24	4-043-579-01	COVER, REAR (KV-32V15)	
9	△ 8-598-254-00	TUNER BTR-WA402		25	4-043-661-01	COVER, REAR (KV-27V10/27V15/29V10C/29V10M)	
10	△ 8-598-047-00	TUNER (KV-32V15)		26	4-043-457-01	BAFFLE, SPEAKER	
				27	4-374-745-11	CUSHION (A)	
				28	1-504-524-11	SPEAKER (8CM)	
11	*1-751-136-11	CABLE, PIN (KV-32V15)		29	4-043-458-01	COVER, SPEAKER	
12	*1-751-135-11	CABLE, PIN (KV-32V15)					
13	1-417-178-11	SELECTOR, ANTENNA (AS-2) (KV-32V15)					
14	*A-1394-527-A	UA BOARD, COMPLETE (KV-27V15)					
	*A-1394-529-A	UA BOARD, COMPLETE (KV-32V15)					
	*A-1394-552-A	UA BOARD, COMPLETE (KV-27V10/29V10C/29V10M)					
15	*A-1306-454-A	M BOARD, COMPLETE (KV-27V10/27V15/32V15)					
	*A-1306-462-A	M BOARD, COMPLETE (KV-29V10C/29V10M)					

7-2. PICTURE TUBE



The components identified by shading and mark \triangle are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	4-043-659-01	PANEL (LEFT), CONTROL		63	\triangle 1-402-952-12	COIL, DEMAGNETIZATION (KV-32V15)	
52	4-043-658-01	PANEL (RIGHT), CONTROL		64	*4-371-629-01	STOPPER, WIRE (KV-32V15)	
53	4-043-433-01	DOOR, CONTROL	(KV-27V10/27V15/29V10C/29V10M)	65	4-033-681-01	HOLDER, LEAD (KV-32V15)	
	4-043-433-21	DOOR, CONTROL (KV-32V15)		66	4-041-268-01	SCREW (7), TAPPING	
54	*4-389-517-01	GUIDE (R), LIGHT		67	4-040-388-01	HOLDER(S), DGC	(KV-27V10/27V15/29V10C/29V10M)
55	4-043-578-01	CABINET (WITH BEZEL)	(KV-32V15)	68	\triangle 1-406-726-22	COIL, DEMAGNETIZATION	(KV-27V10/27V15/29V10M)
	4-043-660-01	CABINET (WITH BEZEL)	(KV-27V10/27V15/29V10C/29V10M)	69	\triangle 1-406-726-41	COIL, DEMAGNETIZATION (KV-29V10C)	
56	\triangle 8-733-723-05	PICTURE TUBE (A80JYV50X) (KV-32V15)		70	4-040-387-01	HOLDER (M), DGC	(KV-27V10/27V15/29V10C/29V10M)
	\triangle 8-733-848-05	PICTURE TUBE (A68KZJ50X)	(KV-27V10/27V15/29V10C/29V10M)	71	4-308-870-00	CLIP, LEAD WIRE	
57	\triangle 8-451-275-42	DEFLECTION YOKE Y28PPA(VTM)	(KV-27V10/27V15/29V10C/29V10M)	72	1-452-032-00	MAGNET, DISK; 10MM ϕ	
	\triangle 8-451-315-41	DEFLECTION YOKE Y34FXA(VTM) (KV-32V15)		73	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
58	4-036-329-01	SPRING (B), TENSION		73	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
59	4-041-361-01	SPACER, DEFLECTION YOKE					
60	*A-1331-351-A	C BOARD, COMPLETE (KV-32V15)					
61	*A-1331-327-A	C BOARD, COMPLETE (KV-27V10/27V15/29V10C/29V10M)					

SECTION 8
ELECTRICAL PARTS LIST

P (KV-27V15/32V15)

NOTE:

The components identified by shading and mark  are critical for safety.

Replace only with part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS

MF : μ F, PF : $\mu\mu$ F COILS MMH : mH, UH : μ H

- The components identified by  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK						
*A-1195-062-A P BOARD, COMPLETE (KV-27V15/32V15) *****													
C3201	1-124-477-11	ELECT	47MF	20%	16V	C3249	1-163-117-00	CERAMIC CHIP 100PF 5%	50V				
C3203	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C3250	1-163-113-00	CERAMIC CHIP 68PF 5%	50V				
C3204	1-124-907-11	ELECT	10MF	20%	50V	C3251	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V				
C3205	1-124-907-11	ELECT	10MF	20%	50V	C3252	1-163-103-00	CERAMIC CHIP 27PF 5%	50V				
C3206	1-124-907-11	ELECT	10MF	20%	50V	C3253	1-163-101-00	CERAMIC CHIP 22PF 5%	50V				
C3207	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C3254	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3208	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C3255	1-163-101-00	CERAMIC CHIP 22PF 5%	50V				
C3209	1-126-962-11	ELECT	3.3MF	20%	50V	C3256	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V				
C3210	1-124-477-11	ELECT	47MF	20%	16V	C3257	1-163-117-00	CERAMIC CHIP 100PF 5%	50V				
C3212	1-126-962-11	ELECT	3.3MF	20%	50V	C3258	1-163-113-00	CERAMIC CHIP 68PF 5%	50V				
C3213	1-164-346-11	CERAMIC CHIP	1MF		16V	C3259	1-163-111-00	CERAMIC CHIP 56PF 5%	50V				
C3214	1-164-346-11	CERAMIC CHIP	1MF		16V	C3260	1-163-119-00	CERAMIC CHIP 120PF 5%	50V				
C3215	1-164-346-11	CERAMIC CHIP	1MF		16V	C3261	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3216	1-164-005-11	CERAMIC CHIP	0.47MF		25V	C3263	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3217	1-164-346-11	CERAMIC CHIP	1MF		16V	C3264	1-165-319-11	CERAMIC CHIP 0.1MF 5%	50V				
C3218	1-164-346-11	CERAMIC CHIP	1MF		16V	C3265	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3219	1-126-103-11	ELECT	470MF	20%	16V	C3266	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3220	1-164-346-11	CERAMIC CHIP	1MF		16V	C3267	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3221	1-164-346-11	CERAMIC CHIP	1MF		16V	C3268	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3222	1-164-336-11	CERAMIC CHIP	0.33MF		25V	C3269	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3223	1-164-336-11	CERAMIC CHIP	0.33MF		25V	C3270	1-165-319-11	CERAMIC CHIP 0.1MF 5%	50V				
C3224	1-164-222-11	CERAMIC CHIP	0.22MF		25V	C3271	1-165-319-11	CERAMIC CHIP 0.1MF 5%	50V				
C3225	1-164-222-11	CERAMIC CHIP	0.22MF		25V	C3272	1-165-319-11	CERAMIC CHIP 0.1MF 5%	50V				
C3226	1-164-005-11	CERAMIC CHIP	0.47MF		25V	C3273	1-163-109-00	CERAMIC CHIP 47PF 5%	50V				
C3227	1-164-346-11	CERAMIC CHIP	1MF		16V	C3274	1-163-101-00	CERAMIC CHIP 22PF 5%	50V				
C3228	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C3275	1-163-101-00	CERAMIC CHIP 22PF 5%	50V				
C3229	1-163-093-00	CERAMIC CHIP	10PF	5%	50V	C3276	1-163-111-00	CERAMIC CHIP 56PF 5%	50V				
C3230	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	C3277	1-163-101-00	CERAMIC CHIP 22PF 5%	50V				
C3231	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	C3278	1-163-101-00	CERAMIC CHIP 22PF 5%	50V				
C3232	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C3279	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V				
C3233	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C3280	1-124-907-11	ELECT 10MF 20%	50V				
C3234	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C3282	1-164-346-11	CERAMIC CHIP 1MF 16V					
C3235	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<CONNECTOR>							
C3236	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	CN150	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P					
C3237	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<DIODE>							
C3238	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	D3202	8-719-031-68	DIODE HVU359TRF					
C3239	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	D3203	8-719-404-46	DIODE MA110					
C3240	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	D3208	8-719-110-17	DIODE RD10ESB2					
C3241	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	D3209	8-719-110-17	DIODE RD10ESB2					
C3242	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	<IC>							
C3243	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	IC3200	8-759-971-56	IC MB81461B-12RS-PSZ					
C3244	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	IC3201	8-759-093-29	IC MB86144BPF-G-BND					
C3245	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	IC3202	8-759-093-28	IC MB40176PF-G-BND-EF					
C3246	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	IC3203	8-759-093-28	IC MB40176PF-G-BND-EF					
C3247	1-163-033-00	CERAMIC CHIP	0.022MF		50V	IC3204	8-759-093-26	IC MB3512PFQ-G-BND-EF					
C3248	1-163-125-00	CERAMIC CHIP	220PF	5%	50V								

P (KV-27V15/32V15)

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
IC3205	8-759-243-19	IC TC7SU04F		R3238	1-216-049-00	METAL GLAZE 1K 5%	1/10W
		<COIL>		R3239	1-216-043-00	METAL GLAZE 560 5%	1/10W
L3201	1-410-470-11	INDUCTOR 10UH		R3241	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
L3202	1-408-424-00	INDUCTOR 180UH		R3242	1-216-049-00	METAL GLAZE 1K 5%	1/10W
L3203	1-408-424-00	INDUCTOR 180UH		R3243	1-216-025-00	METAL GLAZE 100 5%	1/10W
L3204	1-410-476-11	INDUCTOR 33UH		R3244	1-216-025-00	METAL GLAZE 100 5%	1/10W
L3205	1-410-470-11	INDUCTOR 10UH		R3245	1-216-025-00	METAL GLAZE 100 5%	1/10W
L3206	1-410-387-11	INDUCTOR 33UH		R3246	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
L3207	1-410-387-11	INDUCTOR 33UH		R3247	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
L3208	1-410-387-11	INDUCTOR 33UH		R3248	1-216-295-00	METAL GLAZE 0 5%	1/10W
L3209	1-410-387-11	INDUCTOR 33UH		R3249	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
		<TRANSISTOR>		R3250	1-216-043-00	METAL GLAZE 560 5%	1/10W
Q3201	8-729-216-22	TRANSISTOR 2SA1162-G		R3251	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q3202	8-729-422-27	TRANSISTOR 2SD601A-Q		R3252	1-216-043-00	METAL GLAZE 560 5%	1/10W
Q3203	8-729-216-22	TRANSISTOR 2SA1162-G		R3253	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
Q3204	8-729-216-22	TRANSISTOR 2SA1162-G		R3254	1-216-043-00	METAL GLAZE 560 5%	1/10W
Q3205	8-729-422-27	TRANSISTOR 2SD601A-Q		R3255	1-216-041-00	METAL GLAZE 470 5%	1/10W
Q3206	8-729-216-22	TRANSISTOR 2SA1162-G		R3256	1-216-043-00	METAL GLAZE 560 5%	1/10W
Q3207	8-729-216-22	TRANSISTOR 2SA1162-G		R3259	1-216-298-00	METAL GLAZE 2.2 5%	1/10W
Q3208	8-729-422-27	TRANSISTOR 2SD601A-Q		R3260	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q3209	8-729-216-22	TRANSISTOR 2SA1162-G		R3263	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q3210	8-729-216-22	TRANSISTOR 2SA1162-G		R3264	1-216-025-00	METAL GLAZE 100 5%	1/10W
		<RESISTOR>		R3265	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R3201	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R3266	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R3202	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R3267	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W
R3203	1-216-025-00	METAL GLAZE 100 5%	1/10W	R3268	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R3204	1-216-025-00	METAL GLAZE 100 5%	1/10W	R3269	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R3205	1-216-121-00	METAL GLAZE 1M 5%	1/10W	R3270	1-216-657-11	METAL CHIP 1.8K 0.50%	1/10W
R3207	1-216-295-00	METAL GLAZE 0 5%	1/10W	R3271	1-216-655-11	METAL CHIP 1.5K 0.50%	1/10W
R3208	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R3273	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R3209	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R3274	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R3210	1-216-089-91	METAL GLAZE 47K 5%	1/10W	R3275	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R3211	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R3276	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R3212	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R3277	1-216-298-00	METAL GLAZE 2.2 5%	1/10W
R3213	1-216-075-00	METAL GLAZE 12K 5%	1/10W			<CRYSTAL>	
R3214	1-216-121-00	METAL GLAZE 1M 5%	1/10W	X3201	1-567-878-11	VIBRATOR, CRYSTAL	
R3215	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	X3202	1-567-878-11	VIBRATOR, CRYSTAL	
R3216	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W			*****	
R3217	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W			*A-1297-221-A A BOARD, COMPLETE	
R3218	1-216-049-00	METAL GLAZE 1K 5%	1/10W			*****	
R3219	1-216-049-00	METAL GLAZE 1K 5%	1/10W			(KV-27V10/27V15/29V10C/29V10M)	
R3220	1-216-049-00	METAL GLAZE 1K 5%	1/10W			*A-1297-233-A A BOARD, COMPLETE (KV-32V15)	
R3221	1-216-655-11	METAL CHIP 1.5K 0.50%	1/10W			*****	
R3222	1-216-655-11	METAL CHIP 1.5K 0.50%	1/10W				
R3223	1-216-025-00	METAL GLAZE 100 5%	1/10W	C173	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R3224	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C174	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R3225	1-216-025-00	METAL GLAZE 100 5%	1/10W	C175	1-126-935-11	ELECT 470MF	20% 16V
R3226	1-216-085-00	METAL GLAZE 33K 5%	1/10W	C176	1-126-935-11	ELECT 470MF	20% 16V
R3227	1-216-647-11	METAL CHIP 680 0.50%	1/10W	C177	1-126-964-11	ELECT 10MF	20% 50V
R3228	1-216-045-00	METAL GLAZE 680 5%	1/10W	C178	1-126-933-11	ELECT 100MF	20% 16V
R3229	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C179	1-124-916-11	ELECT 22MF	20% 25V
R3230	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C180	1-124-916-11	ELECT 22MF	20% 25V
R3231	1-216-001-00	METAL GLAZE 10 5%	1/10W			(KV-32V15)	
R3232	1-216-083-00	METAL GLAZE 27K 5%	1/10W	C181	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R3233	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C182	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R3234	1-216-651-11	METAL CHIP 1K 0.50%	1/10W	C184	1-126-964-11	ELECT 10MF	20% 50V
R3235	1-216-043-00	METAL GLAZE 560 5%	1/10W	C185	1-126-964-11	ELECT 10MF	20% 50V
R3236	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W			(KV-32V15)	
R3237	1-216-043-00	METAL GLAZE 560 5%	1/10W				

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REF. NO. PART NO. DESCRIPTION

REF. NO. PART NO. DESCRIPTION

REMARK

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **▲** are critical for safety. Replace only with part number specified.

<CONNECTOR>

CN103 *1-564-519-11 PLUG, CONNECTOR 4P
 CN151 1-573-979-21 CONNECTOR, BOARD TO BOARD 11P
 CN152 1-750-394-11 PIN, CONNECTOR (STAKING) 32P
 CN164 1-564-505-11 PLUG, CONNECTOR 2P
 CN165 1-564-505-11 PLUG, CONNECTOR 2P
 CN208 1-564-510-11 PLUG, CONNECTOR 7P
 (KV-27V10/27V15/29V10C/29V10M)

TU101▲ 8-598-254-00 TUNER BTF-WA402
 TU102▲ 8-598-047-00 TUNER (KV-32V15)

<DIODE>

D170 8-719-110-76 DIODE RD33ESB1
 D175 8-719-110-76 DIODE RD33ESB1 (KV-32V15)

<CAPACITOR>

C002 1-163-809-11 CERAMIC CHIP 0.047MF 10% 25V
 C003 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C005 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C006 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C007 1-124-903-11 ELECT 1MF 20% 50V

<IC>

IC172 8-759-932-67 IC BU4053BF

C008 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C009 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C010 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C012 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C013 1-163-001-11 CERAMIC CHIP 220PF 10% 50V

<COIL>

L170 1-408-408-00 INDUCTOR 8.2UH
 L171 1-408-408-00 INDUCTOR 8.2UH
 L172 1-408-408-00 INDUCTOR 8.2UH
 L173 1-408-408-00 INDUCTOR 8.2UH (KV-32V15)

C014 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C015 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C016 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C017 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C018 1-163-001-11 CERAMIC CHIP 220PF 10% 50V

<TRANSISTOR>

Q172 8-729-216-22 TRANSISTOR 2SA1162-G (KV-32V15)
 Q173 8-729-216-22 TRANSISTOR 2SA1162-G (KV-32V15)

C019 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C021 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C022 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C023 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C025 1-163-001-11 CERAMIC CHIP 220PF 10% 50V

<RESISTOR>

R170 1-216-025-00 METAL GLAZE 100 5% 1/10W
 (KV-27V10/27V15/29V10C/29V10M)
 R173 1-216-295-00 METAL GLAZE 0 5% 1/10W
 (KV-32V15)

C028 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C029 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C032 1-124-902-00 ELECT 0.47MF 20% 50V
 C033 1-126-933-11 ELECT 100MF 20% 10V
 C034 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 (KV-27V10/27V15/32V15)

R174 1-216-689-11 METAL GLAZE 39K 5% 1/10W
 R175 1-215-900-11 METAL OXIDE 22K 5% 2W F
 (KV-32V15)
 R176 1-216-295-00 METAL GLAZE 0 5% 1/10W
 (KV-27V10/27V15/29V10C/29V10M)

C035 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 (KV-27V10/27V15/32V15)
 C041 1-163-009-11 CERAMIC CHIP 0.001MF 10% 50V
 C043 1-163-159-00 CERAMIC CHIP 12PF 2% 50V
 C045 1-126-940-11 ELECT 330MF 20% 16V

R177 1-215-900-11 METAL OXIDE 22K 5% 2W F
 R179 1-216-065-00 METAL GLAZE 4.7K 5% 1/10W
 R181 1-216-025-00 METAL GLAZE 100 5% 1/10W
 (KV-32V15)

C047 1-104-896-11 CERAMIC CHIP 24PF 2% 50V
 C048 1-126-964-11 ELECT 10MF 20% 50V
 C049 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C050 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C051 1-163-031-11 CERAMIC CHIP 0.01MF 10% 50V

R185 1-216-025-00 METAL GLAZE 100 5% 1/10W
 (KV-32V15)

C052 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C053 1-163-121-00 CERAMIC CHIP 150PF 5% 50V
 C054 1-163-125-00 CERAMIC CHIP 220PF 5% 50V
 C055 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
 C056 1-163-001-11 CERAMIC CHIP 220PF 10% 50V

R187 1-216-083-00 METAL GLAZE 27K 5% 1/10W
 R188 1-216-689-11 METAL GLAZE 39K 5% 1/10W
 (KV-32V15)

C057 1-163-017-00 CERAMIC CHIP 0.0047MF 10% 50V
 C058 1-163-037-11 CERAMIC CHIP 0.022MF 10% 25V
 C059 1-163-001-11 CERAMIC CHIP 220PF 10% 50V

R189 1-216-083-00 METAL GLAZE 27K 5% 1/10W
 (KV-32V15)

C060 1-124-903-11 ELECT 1MF 20% 50V
 C062 1-126-964-11 ELECT 10MF 20% 50V

R190 1-216-065-00 METAL GLAZE 4.7K 5% 1/10W
 (KV-32V15)
 R191 1-216-065-00 METAL GLAZE 4.7K 5% 1/10W
 (KV-32V15)

C150 1-136-165-00 FILM 0.1MF 5% 50V
 (KV-27V10/27V15/32V15)

R193 1-216-037-00 METAL GLAZE 330 5% 1/10W
 (KV-32V15)



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C151	1-136-175-00	FILM	0.068MF 5% 50V (KV-27V10/27V15/32V15)				
C152	1-126-964-11	ELECT	10MF 20% 50V (KV-27V10/27V15/32V15)				<CONNECTOR>
C153	1-137-367-11	FILM	0.0033MF 5% 50V (KV-27V10/27V15/32V15)		CN129	*1-564-521-11	PLUG, CONNECTOR 6P
C154	1-163-038-00	CERAMIC CHIP	0.1MF 25V (KV-27V10/27V15/32V15)		CN130	*1-573-301-21	CONNECTOR, BOARD TO BOARD 20P
C155	1-126-964-11	ELECT	10MF 20% 50V (KV-27V10/27V15/32V15)		CN131	*1-691-914-11	CONNECTOR, BOARD TO BOARD 15P
C156	1-163-135-00	CERAMIC CHIP	560PF 5% 50V (KV-27V10/27V15/32V15)		CN134	*1-564-521-11	PLUG, CONNECTOR 6P (KV-27V10/27V15/32V15)
C157	1-163-038-00	CERAMIC CHIP	0.1MF 25V (KV-27V10/27V15/32V15)		CN137	1-750-394-11	PIN, CONNECTOR (STAKING) 32P
C158	1-124-903-11	ELECT	1MF 20% 50V (KV-27V10/27V15/32V15)		CN138	*1-564-512-11	PLUG, CONNECTOR 9P
					CN163	*1-564-508-11	PLUG, CONNECTOR 5P (KV-27V10/27V15/32V15)
					CN168	1-564-505-11	PLUG, CONNECTOR 2P
							<DIODE>
C160	1-124-903-11	ELECT	1MF 20% 50V		D001	8-719-404-46	DIODE MA110
C201	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V		D002	8-719-404-46	DIODE MA110
C202	1-163-001-11	CERAMIC CHIP	220PF 10% 50V		D004	8-719-404-46	DIODE MA110 (KV-27V10/27V15/32V15)
C203	1-163-989-11	CERAMIC CHIP	0.033MF 10% 25V		D005	8-713-300-57	DIODE 1T33
C204	1-126-933-11	ELECT	100MF 20% 16V		D006	8-719-110-17	DIODE RD10ESB2
C205	1-163-001-11	CERAMIC CHIP	220PF 10% 50V		D007	8-719-110-17	DIODE RD10ESB2
C211	1-163-989-11	CERAMIC CHIP	0.033MF 10% 25V		D008	8-719-110-17	DIODE RD10ESB2
C212	1-124-902-00	ELECT	0.47MF 20% 50V		D009	8-719-110-17	DIODE RD10ESB2
C213	1-124-902-00	ELECT	0.47MF 20% 50V		D150	8-719-404-46	DIODE MA110 (KV-27V10/27V15/32V15)
C214	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V		D201	8-719-404-46	DIODE MA110
C216	1-104-665-11	ELECT	100MF 20% 25V		D202	8-719-404-46	DIODE MA110
C301	1-163-117-00	CERAMIC CHIP	100PF 5% 50V		D205	8-719-110-17	DIODE RD10ESB2
C305	1-126-964-11	ELECT	10MF 20% 50V		D206	8-719-110-17	DIODE RD10ESB2
C306	1-124-902-00	ELECT	0.47MF 20% 50V		D207	8-719-510-48	DIODE D1N20R (KV-27V10/27V15/32V15)
C307	1-163-125-00	CERAMIC CHIP	220PF 5% 50V		D301	8-719-110-17	DIODE RD10ESB2
C308	1-163-099-00	CERAMIC CHIP	18PF 5% 50V		D304	8-719-110-17	DIODE RD10ESB2
C310	1-124-916-11	ELECT	22MF 20% 25V				<IC>
C311	1-124-903-11	ELECT	1MF 20% 50V		IC101	8-752-851-01	IC CXP80424-079S
C313	1-163-003-11	CERAMIC CHIP	330PF 10% 50V		IC102	8-759-168-37	IC ST24C01B1
C315	1-126-964-11	ELECT	10MF 20% 50V (KV-27V10/27V15/32V15)		IC103	8-759-805-37	IC L78LR05D-MA
C316	1-126-964-11	ELECT	10MF 20% 50V (KV-27V10/27V15/32V15)		IC150	8-759-084-28	IC MC144143P1 (KV-27V10/27V15/32V15)
C317	1-126-964-11	ELECT	10MF 20% 50V (KV-27V10/27V15/32V15)		IC201	8-759-090-21	IC TDA8424
C318	1-136-165-00	FILM	0.1MF 5% 50V		IC202	8-759-983-69	IC LM358PS
C319	1-136-165-00	FILM	0.1MF 5% 50V		IC301	8-752-059-67	IC CXA1465AS
C320	1-136-165-00	FILM	0.1MF 5% 50V				<COIL>
C321	1-126-952-11	ELECT	1000MF 20% 16V		L001	1-410-470-11	INDUCTOR
C322	1-136-153-00	FILM	0.01MF 5% 50V		L002	1-408-414-00	INDUCTOR
C323	1-126-923-11	ELECT	220MF 20% 10V		L150	1-410-470-11	INDUCTOR
C324	1-163-003-11	CERAMIC CHIP	330PF 10% 50V				10UH
C325	1-163-037-11	CERAMIC CHIP	0.022MF 10% 25V				27UH
C326	1-136-169-00	FILM	0.22MF 5% 50V				10UH
C327	1-136-169-00	FILM	0.22MF 5% 50V				(KV-27V10/27V15/32V15)
C328	1-124-902-00	ELECT	0.47MF 20% 50V				<TRANSISTOR>
C329	1-124-903-11	ELECT	1MF 20% 50V		Q001	8-729-216-22	TRANSISTOR 2SA1162-G
C330	1-126-964-11	ELECT	10MF 20% 50V		Q004	8-729-216-22	TRANSISTOR 2SA1162-G
C332	1-164-489-11	CERAMIC CHIP	0.22MF 10% 16V		Q005	8-729-422-27	TRANSISTOR 2SD601A-Q
C333	1-163-011-11	CERAMIC CHIP	0.0015MF 10% 50V		Q151	8-729-422-27	TRANSISTOR 2SD601A-Q
C334	1-124-902-00	ELECT	0.47MF 20% 50V				(KV-27V10/27V15/32V15)
C335	1-163-001-11	CERAMIC CHIP	220PF 10% 50V		Q201	8-729-422-27	TRANSISTOR 2SD601A-Q
C336	1-124-903-11	ELECT	1MF 20% 50V		Q301	8-729-216-22	TRANSISTOR 2SA1162-G
C337	1-124-902-00	ELECT	0.47MF 20% 50V		Q302	8-729-216-22	TRANSISTOR 2SA1162-G
C338	1-136-153-00	FILM	0.01MF 5% 50V		Q308	8-729-422-27	TRANSISTOR 2SD601A-Q
C340	1-124-903-11	ELECT	1MF 20% 50V				
C341	1-163-005-11	CERAMIC CHIP	470PF 10% 50V				
C342	1-137-414-11	FILM	0.0047MF 10% 100V				

M

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
<RESISTOR>											
JR200	1-216-295-00	METAL GLAZE	0	5%	1/10W	R063	1-216-033-00	METAL GLAZE	220	5%	1/10W (KV-27V10/27V15/32V15)
JR201	1-216-295-00	METAL GLAZE	0	5%	1/10W	R064	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
JR202	1-216-295-00	METAL GLAZE	0	5%	1/10W	R065	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R002	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R066	1-216-025-00	METAL GLAZE	100	5%	1/10W
R003	1-216-033-00	METAL GLAZE	220	5%	1/10W	R067	1-216-025-00	METAL GLAZE	100	5%	1/10W
R004	1-216-033-00	METAL GLAZE	220	5%	1/10W	R069	1-216-033-00	METAL GLAZE	220	5%	1/10W (KV-27V10/27V15/32V15)
R005	1-216-033-00	METAL GLAZE	220	5%	1/10W	R070	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R006	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R071	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R007	1-216-033-00	METAL GLAZE	220	5%	1/10W	R074	1-216-295-00	METAL GLAZE	0	5%	1/10W
R008	1-216-033-00	METAL GLAZE	220	5%	1/10W	R075	1-216-295-00	METAL GLAZE	0	5%	1/10W
R009	1-216-033-00	METAL GLAZE	220	5%	1/10W	R076	1-216-295-00	METAL GLAZE	0	5%	1/10W
R011	1-216-033-00	METAL GLAZE	220	5%	1/10W	R078	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R012	1-216-033-00	METAL GLAZE	220	5%	1/10W	R079	1-216-295-00	METAL GLAZE	0	5%	1/10W
R013	1-216-033-00	METAL GLAZE	220	5%	1/10W	R080	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R016	1-216-033-00	METAL GLAZE	220	5%	1/10W	R082	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R017	1-216-033-00	METAL GLAZE	220	5%	1/10W	R083	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R018	1-216-033-00	METAL GLAZE	220	5%	1/10W	R086	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R019	1-216-033-00	METAL GLAZE	220	5%	1/10W	R087	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R020	1-216-033-00	METAL GLAZE	220	5%	1/10W	R091	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R021	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R092	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R022	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R093	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R023	1-216-033-00	METAL GLAZE	220	5%	1/10W	R150	1-216-097-00	METAL GLAZE	100K	5%	1/10W (KV-27V10/27V15/32V15)
R025	1-216-033-00	METAL GLAZE	220	5%	1/10W	R151	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R026	1-216-097-00	METAL GLAZE	100K	5%	1/10W	R152	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R027	1-216-121-00	METAL GLAZE	1M	5%	1/10W	R153	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W (KV-27V10/27V15/32V15)
R028	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R154	1-216-041-00	METAL GLAZE	470	5%	1/10W (KV-27V10/27V15/32V15)
R029	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R155	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R030	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R156	1-216-073-00	METAL GLAZE	10K	5%	1/10W (KV-27V10/27V15/32V15)
R031	1-216-033-00	METAL GLAZE	220	5%	1/10W	R157	1-216-073-00	METAL GLAZE	10K	5%	1/10W (KV-27V10/27V15/32V15)
R032	1-216-033-00	METAL GLAZE	220	5%	1/10W	R158	1-216-073-00	METAL GLAZE	10K	5%	1/10W (KV-27V10/27V15/32V15)
R033	1-216-033-00	METAL GLAZE	220	5%	1/10W	R159	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R034	1-216-033-00	METAL GLAZE	220	5%	1/10W	R160	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R035	1-216-033-00	METAL GLAZE	220	5%	1/10W	R161	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R036	1-216-033-00	METAL GLAZE	220	5%	1/10W	R162	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W (KV-27V10/27V15/32V15)
R037	1-216-033-00	METAL GLAZE	220	5%	1/10W	R163	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W (KV-27V10/27V15/32V15)
R038	1-216-033-00	METAL GLAZE	220	5%	1/10W	R164	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W (KV-27V10/27V15/32V15)
R039	1-216-295-00	METAL GLAZE	0	5%	1/10W	R165	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W (KV-27V10/27V15/32V15)
R040	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R166	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R041	1-216-033-00	METAL GLAZE	220	5%	1/10W	R168	1-216-049-00	METAL GLAZE	1K	5%	1/10W (KV-27V10/27V15/32V15)
R042	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R201	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R043	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R202	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R044	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R203	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R045	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R204	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R046	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R205	1-216-295-00	METAL GLAZE	0	5%	1/10W
R048	1-216-073-00	METAL GLAZE	10K	5%	1/10W						
R049	1-216-049-00	METAL GLAZE	1K	5%	1/10W						
R050	1-216-049-00	METAL GLAZE	1K	5%	1/10W						
R051	1-216-073-00	METAL GLAZE	10K	5%	1/10W						
R052	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W						
R053	1-216-049-00	METAL GLAZE	1K	5%	1/10W						
R054	1-216-049-00	METAL GLAZE	1K	5%	1/10W						
R055	1-216-033-00	METAL GLAZE	220	5%	1/10W (KV-27V10/27V15/32V15)						
R056	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W						
R057	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W						
R058	1-216-073-00	METAL GLAZE	10K	5%	1/10W						
R059	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W						
R060	1-216-079-00	METAL GLAZE	18K	5%	1/10W (KV-27V10/27V15/32V15)						
	1-216-295-00	METAL GLAZE	0	5%	1/10W (KV-29V10C/29V10M)						
R062	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W						

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

KV-27V10/27V15
RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15
RM-Y117 RM-Y117 RM-Y121
RM-CM101

M **C**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R206	1-216-295-00	METAL GLAZE	0 5% 1/10W	*A-1331-327-A	C BOARD, COMPLETE	*****	
R207	1-216-085-00	METAL GLAZE	33K 5% 1/10W			(KV-27V10/27V15/29V10C/29V10M)	
R208	1-216-089-91	METAL GLAZE	47K 5% 1/10W	*A-1331-351-A	C BOARD, COMPLETE	(KV-32V15)	*****
R209	1-216-085-00	METAL GLAZE	33K 5% 1/10W				
R210	1-216-089-91	METAL GLAZE	47K 5% 1/10W				
R211	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R212	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R213	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R218	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R219	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R220	1-216-033-00	METAL GLAZE	220 5% 1/10W	C700	1-102-074-00	CERAMIC 0.001MF 10% 50V	
R222	1-216-089-91	METAL GLAZE	47K 5% 1/10W	C701	1-162-114-00	CERAMIC 0.0047MF 2KV	
R223	1-216-045-00	METAL GLAZE	680 5% 1/10W	C702	1-106-375-12	MYLAR 0.022MF 200V	
R301	1-216-025-00	METAL GLAZE	100 5% 1/10W	C703	1-106-375-12	MYLAR 0.022MF 200V	
R302	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C704	1-162-116-00	CERAMIC 680PF 10% 2KV	
R303	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C705	1-123-946-00	ELECT 4.7MF 20% 250V	
R304	1-216-039-00	METAL GLAZE	390 5% 1/10W	C706	1-124-916-11	ELECT 22MF 20% 25V	
R305	1-216-039-00	METAL GLAZE	390 5% 1/10W			(KV-27V10/27V15/29V10C/29V10M)	
R306	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W			1-126-933-11 ELECT 100MF 20% 16V	
R312	1-216-119-00	METAL GLAZE	820K 5% 1/10W			(KV-32V15)	
R313	1-216-079-00	METAL GLAZE	18K 5% 1/10W	C707	1-102-129-00	CERAMIC 0.01MF 10% 50V	
R321	1-216-025-00	METAL GLAZE	100 5% 1/10W	C711	1-164-083-11	CERAMIC 680PF 10% 50V	
R323	1-216-041-00	METAL GLAZE	470 5% 1/10W	C712	1-164-081-11	CERAMIC 470PF 10% 50V	
R324	1-216-025-00	METAL GLAZE	100 5% 1/10W	C731	1-164-083-11	CERAMIC 680PF 10% 50V	
R327	1-216-653-11	METAL CHIP	1.2K 0.50% 1/10W	C732	1-164-081-11	CERAMIC 470PF 10% 50V	
R328	1-216-033-00	METAL GLAZE	220 5% 1/10W	C751	1-164-083-11	CERAMIC 680PF 10% 50V	
R329	1-216-033-00	METAL GLAZE	220 5% 1/10W	C752	1-164-081-11	CERAMIC 470PF 10% 50V	
R330	1-216-295-00	METAL GLAZE	0 5% 1/10W			(KV-27V10/27V15/29V10C/29V10M)	
R331	1-216-678-11	METAL CHIP	13K 0.50% 1/10W			1-164-083-11 CERAMIC 680PF 10% 50V	
R332	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W			(KV-32V15)	
R333	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R334	1-216-687-11	METAL CHIP	33K 0.50% 1/10W				
R335	1-216-121-00	METAL GLAZE	1M 5% 1/10W				
R336	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R337	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R338	1-249-417-11	CARBON	1K 5% 1/4W F	CN701	1-695-915-11	TAB (CONTACT)	
R339	1-216-049-00	METAL GLAZE	1K 5% 1/10W	CN702	1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P	
R340	1-216-077-00	METAL GLAZE	15K 5% 1/10W	CN703	*1-564-509-11	PLUG, CONNECTOR 6P	
R341	1-216-085-00	METAL GLAZE	33K 5% 1/10W				
R342	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R343	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W				
R344	1-216-043-00	METAL GLAZE	560 5% 1/10W	D711	8-719-911-19	DIODE 1SS119 (KV-32V15)	
R345	1-216-109-00	METAL GLAZE	330K 5% 1/10W	D712	8-719-911-19	DIODE 1SS119 (KV-32V15)	
R346	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	D731	8-719-911-19	DIODE 1SS119 (KV-32V15)	
R347	1-249-409-11	CARBON	220 5% 1/4W F	D732	8-719-911-19	DIODE 1SS119 (KV-32V15)	
R348	1-216-097-00	METAL GLAZE	100K 5% 1/10W	D751	8-719-911-19	DIODE 1SS119 (KV-32V15)	
R349	1-216-089-91	METAL GLAZE	47K 5% 1/10W	D752	8-719-911-19	DIODE 1SS119 (KV-32V15)	
R351	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	D770	8-719-911-19	DIODE 1SS119	
R352	1-216-089-91	METAL GLAZE	47K 5% 1/10W	D771	8-719-911-19	DIODE 1SS119	
R354	1-216-033-00	METAL GLAZE	220 5% 1/10W	D772	8-719-911-19	DIODE 1SS119	
R356	1-216-295-00	METAL GLAZE	0 5% 1/10W	D773	8-719-911-19	DIODE 1SS119	
R374	1-216-033-00	METAL GLAZE	220 5% 1/10W	D777	8-719-109-72	DIODE RD3.9ESB2	
R375	1-216-033-00	METAL GLAZE	220 5% 1/10W	D779	8-719-911-19	DIODE 1SS119	
				D791	8-719-911-19	DIODE 1SS119	
				D792	8-719-911-19	DIODE 1SS119	
<CRYSTAL>							
X001	1-579-917-21	VIBRATOR, CRYSTAL		<JACK>			
X301	1-567-505-11	OSCILLATOR, CRYSTAL		J701 Δ 1-540-124-11 SOCKET, PICTURE TUBE			

<COIL>							
L701	1-410-478-11	INDUCTOR		47UH			

C E (KV-32V15)

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<TRANSISTOR>											
Q711	8-729-326-11	TRANSISTOR 2SC2611		R774	1-249-437-11	CARBON	47K				
Q712	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-32V15)		R775	1-249-417-11	CARBON	1K				
Q731	8-729-326-11	TRANSISTOR 2SC2611		R776	1-249-409-11	CARBON	220				
Q732	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-32V15)		R790	1-249-413-11	CARBON	470				
Q751	8-729-326-11	TRANSISTOR 2SC2611		R791	1-249-412-11	CARBON	390				
Q752	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-32V15)		<VARIABLE RESISTOR>							
Q770	8-729-119-76	TRANSISTOR 2SA1175-HFE		RV702	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M					
Q771	8-729-200-17	TRANSISTOR 2SA1091-0		*****							
Q772	8-729-200-17	TRANSISTOR 2SA1091-0		*A-1341-622-A E BOARD, COMPLETE (KV-32V15)							
Q773	8-729-200-17	TRANSISTOR 2SA1091-0		*****							
<RESISTOR>											
R700	1-247-739-11	CARBON	100	R700	1-247-739-11	CARBON	100	5%	1/2W		
R701	1-244-941-00	CARBON	680K	R701	1-244-941-00	CARBON	680K	5%	1/2W		
R702	1-249-496-11	CARBON	100K	R702	1-249-496-11	CARBON	100K	5%	1/2W		
R703	1-249-496-11	CARBON	100K	R703	1-249-496-11	CARBON	100K	5%	1/2W		
R704	1-216-398-11	METAL OXIDE	5.6	R704	1-216-398-11	METAL OXIDE	5.6	5%	3W	F	
R705	1-216-398-11	METAL OXIDE	5.6	R705	1-216-398-11	METAL OXIDE	5.6	5%	3W	F	
R707	1-249-496-11	CARBON	100K	R707	1-249-496-11	CARBON	100K	5%	1/2W		(KV-32V15)
R710	1-247-758-11	CARBON	3.3K	R710	1-247-758-11	CARBON	3.3K	5%	1/2W		
R711	1-247-807-31	CARBON	100	R711	1-247-807-31	CARBON	100	5%	1/4W		
R712	1-215-924-71	METAL OXIDE	15K	R712	1-215-924-71	METAL OXIDE	15K	5%	3W	F	
R714	1-249-425-11	CARBON	4.7K	R714	1-249-425-11	CARBON	4.7K	5%	1/4W		
R716	1-249-411-11	CARBON	330	R716	1-249-411-11	CARBON	330	5%	1/4W		(KV-27V10/27V15/29V10C/29V10M)
	1-249-417-11	CARBON	1K		1-249-417-11	CARBON	1K	5%	1/4W		(KV-32V15)
R717	1-249-393-11	CARBON	10	R717	1-249-393-11	CARBON	10	5%	1/4W		
R718	1-249-413-11	CARBON	470	R718	1-249-413-11	CARBON	470	5%	1/4W		
R730	1-247-758-11	CARBON	3.3K	R730	1-247-758-11	CARBON	3.3K	5%	1/2W		
R731	1-247-807-31	CARBON	100	R731	1-247-807-31	CARBON	100	5%	1/4W		
R732	1-215-924-71	METAL OXIDE	15K	R732	1-215-924-71	METAL OXIDE	15K	5%	3W	F	
R734	1-249-425-11	CARBON	4.7K	R734	1-249-425-11	CARBON	4.7K	5%	1/4W		
R736	1-249-411-11	CARBON	330	R736	1-249-411-11	CARBON	330	5%	1/4W		
R737	1-249-393-11	CARBON	10	R737	1-249-393-11	CARBON	10	5%	1/4W		
R750	1-247-758-31	CARBON	3.3K	R750	1-247-758-31	CARBON	3.3K	5%	1/2W		
R751	1-247-807-31	CARBON	100	R751	1-247-807-31	CARBON	100	5%	1/4W		
R752	1-215-924-71	METAL OXIDE	15K	R752	1-215-924-71	METAL OXIDE	15K	5%	3W	F	
R754	1-249-425-11	CARBON	4.7K	R754	1-249-425-11	CARBON	4.7K	5%	1/4W		
R755	1-247-758-11	CARBON	3.3K	R755	1-247-758-11	CARBON	3.3K	5%	1/2W		
R756	1-249-411-11	CARBON	330	R756	1-249-411-11	CARBON	330	5%	1/4W		
	1-249-413-11	CARBON	470		1-249-413-11	CARBON	470	5%	1/4W		(KV-27V10/27V15/29V10C/29V10M)
R757	1-249-393-11	CARBON	10	R757	1-249-393-11	CARBON	10	5%	1/4W		
R758	1-249-417-11	CARBON	1K	R758	1-249-417-11	CARBON	1K	5%	1/4W	F	
R770	1-249-433-11	CARBON	22K	R770	1-249-433-11	CARBON	22K	5%	1/4W		
R771	1-249-409-11	CARBON	220	R771	1-249-409-11	CARBON	220	5%	1/4W	F	
R772	1-249-409-11	CARBON	220	R772	1-249-409-11	CARBON	220	5%	1/4W	F	
R773	1-249-409-11	CARBON	220	R773	1-249-409-11	CARBON	220	5%	1/4W	F	
<CONNECTOR>											
CN122	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P									
CN123	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P									
DY-2	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P									
<DIODE>											
D1501	8-719-911-19	DIODE 1SS119									
D1502	8-719-801-35	THYRISTOR SH0R3D42									
D1503	8-719-980-78	DIODE ERA83-006									
D1504	8-719-302-43	DIODE EL1Z									
D1505	8-719-911-19	DIODE 1SS119									
D1506	8-719-911-19	DIODE 1SS119									
D1507	8-719-911-19	DIODE 1SS119									
D1508	8-719-110-17	DIODE RD10ESB2									
D1509	8-719-110-17	DIODE RD10ESB2									
D1510	8-719-911-19	DIODE 1SS119									
D1513	8-719-302-43	DIODE EL1Z									
D1515	8-719-911-19	DIODE 1SS119									
D1516	8-719-987-87	DIODE ERA85-009									
D1517	8-719-911-19	DIODE 1SS119									

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

KV-27V10/27V15
RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15
RM-Y117 RM-Y117 RM-Y121
RM-CM101

E (KV-32V15) **D**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<IC>											
IC1501	8-752-052-88	IC CXA1526P		R1578	1-249-423-11	CARBON	3.3K 5% 1/4W				
IC1502	8-759-701-59	IC NJM78M09FA		R1582	1-249-411-11	CARBON	330 5% 1/4W				
IC1504	8-759-135-80	IC UPC358C		R1583	1-249-421-11	CARBON	2.2K 5% 1/4W				
				R1585	1-249-441-11	CARBON	100K 5% 1/4W				
				R1586	1-247-891-00	CARBON	330K 5% 1/4W				
<COIL>											
L1502	1-459-592-11	COIL (WITH CORE) (PMC)		*A-1346-192-A	D BOARD, COMPLETE (KV-27V10/29V10M)						
L1504	1-459-474-11	COIL (WITH CORE)		*A-1346-199-A	D BOARD, COMPLETE (KV-29V10C)						
<TRANSISTOR>											
Q1501	8-729-119-78	TRANSISTOR 2SC2785-HFE		*A-1346-200-A	D BOARD, COMPLETE (KV-27V15)						
Q1502	8-729-140-96	TRANSISTOR 2SD774-34		*A-1346-201-A	D BOARD, COMPLETE (KV-32V15)						
Q1503	8-729-119-76	TRANSISTOR 2SA1175-HFE		4-382-854-11	SCREW (M3X10), P, SW (+)						
Q1506	8-729-119-78	TRANSISTOR 2SC2785-HFE		<CAPACITOR>							
Q1507	8-729-119-78	TRANSISTOR 2SC2785-HFE		C501	1-124-557-11	ELECT	1000MF 20% 25V				
Q1508	8-729-140-93	TRANSISTOR 2SB733-34		C502	1-162-131-11	CERAMIC	220PF 10% 2KV				
Q1509	8-729-140-93	TRANSISTOR 2SB733-34		C503	1-124-557-11	ELECT	1000MF 20% 25V				
Q1511	8-729-119-76	TRANSISTOR 2SA1175-HFE		C504	1-137-366-11	FILM	0.0022MF 5% 50V				
Q1514	8-729-209-15	TRANSISTOR 2SD2012		C505	1-124-916-11	ELECT	22MF 20% 25V				
Q1519	8-729-119-78	TRANSISTOR 2SC2785-HFE		C506	1-128-560-11	ELECT	22MF 20% 100V				
Q1520	8-729-119-78	TRANSISTOR 2SC2785-HFE		C507	1-123-947-00	ELECT	10MF 20% 160V				
<RESISTOR>				C508	1-129-898-00	FILM	0.0022MF 5% 630V				
R1501	1-249-409-11	CARBON 220 5% 1/4W		C509	1-124-916-11	ELECT	(KV-27V10/27V15/29V10C/29V10M)				
R1502	1-249-409-11	CARBON 220 5% 1/4W		C511	1-123-024-21	ELECT	33MF 20% 160V				
R1503	1-249-435-11	CARBON 33K 5% 1/4W		C512	1-102-212-00	CERAMIC	820PF 10% 500V				
R1504	1-249-429-11	CARBON 10K 5% 1/4W		C513	1-102-212-00	CERAMIC	820PF 10% 500V				
R1505	1-249-421-11	CARBON 2.2K 5% 1/4W		C514	1-102-244-00	CERAMIC	220PF 10% 500V				
R1506	1-249-423-11	CARBON 3.3K 5% 1/4W		C515	1-137-416-11	FILM	0.01MF 10% 100V				
R1507	1-249-410-11	CARBON 270 5% 1/4W		C517	1-162-116-00	CERAMIC	680PF 10% 2KV				
R1508	1-249-437-11	CARBON 47K 5% 1/4W		C518	1-162-116-00	CERAMIC	680PF 10% 2KV				
R1509	1-249-429-11	CARBON 10K 5% 1/4W		C519	Δ 1-104-771-11	FILM	0.02MF 3% 2KV				
R1510	1-215-461-00	METAL 47K 1% 1/4W		C520	Δ 1-162-134-91	CERAMIC	470PF 10% 2KV				
R1511	1-216-379-11	METAL OXIDE 6.8 5% 2W F		C521	Δ 1-136-316-51	FILM	0.056MF 5% 630V				
R1513	1-249-423-11	CARBON 3.3K 5% 1/4W		C522	1-106-383-00	MYLAR	0.047MF 99% 200V				
R1514	1-247-885-00	CARBON 180K 5% 1/4W		C523	1-102-002-00	CERAMIC	680PF 10% 500V				
R1515	1-215-905-11	METAL OXIDE 10 5% 3W F		C524	1-102-212-00	CERAMIC	820PF 10% 500V				
R1519	1-249-417-11	CARBON 1K 5% 1/4W		C525	1-124-902-00	ELECT	0.47MF 20% 50V				
R1520	1-249-417-11	CARBON 1K 5% 1/4W		C526	1-106-395-00	MYLAR	0.15MF 10% 200V				
R1522	1-249-417-11	CARBON 1K 5% 1/4W		C527	1-124-341-00	ELECT	1MF 20% 200V				
R1527	1-249-417-11	CARBON 1K 5% 1/4W F		C528	1-136-113-00	FILM	2MF 5% 200V				
R1528	1-249-438-11	CARBON 56K 5% 1/4W		C529	1-137-410-11	FILM	0.001MF 10% 100V				
R1529	1-249-434-11	CARBON 27K 5% 1/4W		C530	1-104-844-11	FILM	0.62MF 5% 200V				
R1530	1-249-432-11	CARBON 18K 5% 1/4W		C531	1-104-664-11	ELECT	47MF 20% 25V				
R1533	1-249-427-11	CARBON 6.8K 5% 1/4W		C532	1-136-165-00	FILM	0.1MF 5% 50V				
R1534	1-249-424-11	CARBON 3.9K 5% 1/4W		C533	1-124-927-11	ELECT	4.7MF 20% 50V				
R1535	1-249-425-11	CARBON 4.7K 5% 1/4W		C534	1-136-161-00	FILM	0.047MF 5% 50V				
R1536	1-215-857-11	METAL OXIDE 10 5% 1W F		C535	1-126-969-11	ELECT	220MF 20% 50V				
R1537	1-249-404-00	CARBON 82 5% 1/4W		C536	1-137-398-11	FILM	0.068MF 10% 100V				
R1538	1-216-379-11	METAL OXIDE 6.8 5% 2W F		C537	1-126-964-11	ELECT	10MF 20% 50V				
R1541	1-249-441-11	CARBON 100K 5% 1/4W		C538	1-136-161-00	FILM	0.047MF 5% 50V				
R1543	1-249-414-11	CARBON 560 5% 1/4W		C540	1-137-366-11	FILM	0.0022MF 5% 50V				
R1546	1-215-885-00	METAL OXIDE 68 5% 2W F		C541	1-137-366-11	FILM	0.0022MF 5% 50V				
R1552	1-249-426-11	CARBON 5.6K 5% 1/4W		C542	1-130-481-00	FILM	0.0068MF 5% 50V				
R1554	1-249-393-11	CARBON 10 5% 1/4W		C545	1-124-927-11	ELECT	4.7MF 20% 50V				
R1556	1-249-438-11	CARBON 56K 5% 1/4W		C547	1-164-079-11	CERAMIC	330PF 10% 50V				
R1559	1-249-429-11	CARBON 10K 5% 1/4W		C548	Δ 1-162-116-91	CERAMIC	680PF 10% 2KV				
R1564	1-249-435-11	CARBON 33K 5% 1/4W		C550	1-106-387-00	MYLAR	0.068MF 10% 200V				
R1568	1-247-891-00	CARBON 330K 5% 1/4W		C553	1-164-079-11	CERAMIC	330PF 10% 50V				
R1569	1-249-413-11	CARBON 470 5% 1/4W									

KV-27V10/27V15
RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15
RM-Y117 RM-Y117 RM-Y121
RM-CM101

D

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **▲** are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK			REF. NO.	PART NO.	DESCRIPTION	REMARK		
C561	1-162-815-11	CERAMIC	47PF	5%	500V	C2215	1-136-169-00	FILM	0.22MF	5%	50V
C595	1-123-932-00	ELECT	4.7MF	20%	160V	C2216	1-126-941-11	ELECT	470MF	20%	25V
C598	1-124-342-00	ELECT	3.3MF	20%	160V	C2217	1-136-169-00	FILM	0.22MF	5%	50V
C600	1-126-964-11	ELECT	10MF	20%	50V	C2218	1-124-557-11	ELECT	1000MF	20%	25V
C601	▲ 1-136-311-51	FILM	0.47MF	20%	125V	C2219	1-124-557-11	ELECT	1000MF	20%	25V
			(KV-27V10/27V15/29V10M/32V15)			C2220	1-124-925-11	ELECT	2.2MF	20%	50V
	▲ 1-136-511-61	FILM	0.47MF	20%	300V						
			(KV-29V10C)								
C602	▲ 1-136-311-51	FILM	0.47MF	20%	125V						
			(KV-27V10/27V15/29V10M/32V15)								
C603	▲ 1-136-311-51	FILM	0.47MF	20%	125V						
			(KV-27V10/27V15/29V10M/32V15)								
C604	▲ 1-162-578-81	CERAMIC	0.0047MF	20%	400V						
C607	1-125-489-00	ELECT	560MF	20%	250V						
	1-125-495-11	ELECT	470MF	20%	200V						
C608	1-125-489-00	ELECT	560MF	20%	250V						
			(KV-29V10C)								
	1-125-495-11	ELECT	470MF	20%	200V						
C609	1-136-169-00	FILM	0.22MF	5%	50V						
C610	1-136-169-00	FILM	0.22MF	5%	50V						
C611	1-136-169-00	FILM	0.22MF	5%	50V						
C612	1-136-169-00	FILM	0.22MF	5%	50V						
C613	1-164-625-11	CERAMIC	680PF	10%	500V						
C614	1-164-625-11	CERAMIC	680PF	10%	500V						
C616	1-126-964-11	ELECT	10MF	20%	50V						
C617	1-126-953-11	ELECT	2200MF	20%	35V						
C618	1-124-557-11	ELECT	1000MF	20%	25V						
C619	1-126-952-11	ELECT	1000MF	20%	16V						
C620	1-164-644-11	CERAMIC	330PF	10%	500V						
C621	1-126-356-11	ELECT	220MF	20%	160V						
C623	1-162-117-00	CERAMIC	100PF	10%	500V						
C624	1-136-155-00	FILM	0.015MF	5%	50V						
C625	1-129-719-00	FILM	0.027MF	10%	400V						
C626	1-104-665-11	ELECT	100MF	20%	25V						
C628	1-161-740-00	CERAMIC	470PF	10%	400V						
			(KV-29V10C)								
C629	1-108-700-11	MYLAR	470PF	10%	400V						
			(KV-29V10C)								
C630	1-136-165-00	FILM	0.1MF	5%	50V						
C632	1-126-406-11	ELECT	2.2MF	20%	400V						
			(KV-29V10C)								
C633	1-126-933-11	ELECT	100MF	20%	16V						
			(KV-29V10C)								
C634	1-165-127-11	CERAMIC	470PF	10%	500V						
C635	1-124-126-00	ELECT	47MF	20%	16V						
C636	1-137-374-11	FILM	0.047MF	5%	50V						
C637	1-124-916-11	ELECT	22MF	20%	25V						
C639	1-161-740-00	CERAMIC	470PF	10%	400V						
			(KV-27V10/27V15/29V10M/32V15)								
C641	1-126-933-11	ELECT	100MF	20%	10V						
C642	1-137-217-11	FILM	0.01MF	5%	0						
			(KV-27V10/27V15/29V10M/32V15)								
C643	1-137-218-11	FILM	0.012MF	5%	0						
C645	1-102-125-00	CERAMIC	0.0047MF	10%	50V						
C646	1-126-933-11	ELECT	100MF	20%	16V						
C647	1-124-916-11	ELECT	22MF	20%	25V						
C684	1-124-667-11	ELECT	10MF	20%	50V						
C695	1-126-964-11	ELECT	10MF	20%	50V						
C2205	1-124-925-11	ELECT	2.2MF	20%	50V						
C2208	1-124-925-11	ELECT	2.2MF	20%	50V						
C2210	1-104-666-11	ELECT	220MF	20%	25V						
C2211	1-104-664-11	ELECT	47MF	20%	25V						
C2212	1-104-666-11	ELECT	220MF	20%	25V						
C2213	1-136-173-00	FILM	0.47MF	5%	50V						

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque Δ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

KV-27V10/27V15
RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15
RM-Y117 RM-Y117 RM-Y121
RM-CM101

D

- The components identified by  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

D

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
R603	1-249-419-11	CARBON	1.5K 5% 1/4W	R691	1-249-423-11	CARBON	3.3K 5% 1/4W				
R605	1-247-893-11	CARBON	390K 5% 1/4W	R692	1-216-341-11	METAL OXIDE	0.22 5% 1W F				
R606	1-247-893-11	CARBON	390K 5% 1/4W	R693	1-216-389-11	METAL OXIDE	1 5% 3W F				
R607	△ 1-202-933-61	FUSIBLE	0.1 10% 1/2W F	R699	1-216-492-11	METAL OXIDE	82K 5% 3W F				
R608	1-215-860-11	METAL OXIDE	33 5% 1W F	R2209	1-249-427-11	CARBON	6.8K 5% 1/4W				
R609	1-216-369-00	METAL OXIDE	1 5% 2W F	R2210	1-249-435-11	CARBON	33K 5% 1/4W				
R610	1-216-369-00	METAL OXIDE	1 5% 2W F	R2211	1-249-427-11	CARBON	6.8K 5% 1/4W				
R611	1-216-492-11	METAL OXIDE	82K 5% 3W F	R2212	1-249-435-11	CARBON	33K 5% 1/4W				
R613	1-215-883-11	METAL OXIDE	33 5% 2W F	R2215	1-249-425-11	CARBON	4.7K 5% 1/4W				
R614	1-215-883-11	METAL OXIDE	33 5% 2W F	R2216	1-249-437-11	CARBON	47K 5% 1/4W				
R615	1-249-421-11	CARBON	2.2K 5% 1/4W	R2217	1-249-435-11	CARBON	33K 5% 1/4W				
R616	1-249-417-11	CARBON	1K 5% 1/4W	R2218	1-249-441-11	CARBON	100K 5% 1/4W				
R617	1-249-377-11	CARBON	0.47 5% 1/4W F	R2219	1-249-413-11	CARBON	470 5% 1/4W				
R618	1-249-377-11	CARBON	0.47 5% 1/4W F	R2220	1-249-430-11	CARBON	12K 5% 1/4W				
R619	1-249-377-11	CARBON	0.47 5% 1/4W F	R2221	1-249-430-11	CARBON	12K 5% 1/4W				
R621	1-249-377-11	CARBON	0.47 5% 1/4W F	R2222	1-249-398-11	CARBON	27 5% 1/4W				
R622	1-249-377-11	CARBON	0.47 5% 1/4W F	R2223	1-249-418-11	CARBON	1.2K 5% 1/4W				
R623	1-249-377-11	CARBON	0.47 5% 1/4W F	R2224	1-249-418-11	CARBON	1.2K 5% 1/4W				
R624	1-249-377-11	CARBON	0.47 5% 1/4W F	R2225	1-249-398-11	CARBON	27 5% 1/4W				
R625	1-249-377-11	CARBON	0.47 5% 1/4W F	R2226	1-249-385-11	CARBON	2.2 5% 1/4W F				
R627	1-249-377-11	CARBON	0.47 5% 1/4W F	R2227	1-249-385-11	CARBON	2.2 5% 1/4W F				
R628	1-249-377-11	CARBON	0.47 5% 1/4W F	R2228	1-249-421-11	CARBON	2.2K 5% 1/4W				
R629	1-249-388-11	CARBON	3.9 5% 1/4W F	R2229	1-249-421-11	CARBON	2.2K 5% 1/4W				
R630	1-215-857-11	METAL OXIDE	10 5% 1W F	<RELAY>							
R632	1-249-417-11	CARBON	1K 5% 1/4W F	RY601	△ 1-515-684-31	RELAY					
R633	1-249-405-11	CARBON	100 5% 1/4W F	RY602	1-515-684-31	RELAY					
R635	1-249-413-11	CARBON	470 5% 1/4W F	<SWITCH>							
R636	1-249-383-11	CARBON	1.5 5% 1/4W F	S501	1-572-707-11	SWITCH, LEVER					
R637	1-249-421-11	CARBON	2.2K 5% 1/4W	S502	1-572-707-11	SWITCH, LEVER					
R638	1-249-423-11	CARBON	3.3K 5% 1/4W	<TRANSFORMER>							
R639	1-249-423-11	CARBON	3.3K 5% 1/4W	T501	△ 1-453-416-11	TRANSFORMER ASSY, FLYBACK (NX-2604A3)					
R640	△ 1-202-893-91	SOLID	8.2M 20% 1/2W	T502	△ 1-437-195-14	TRANSFORMER, HORIZONTAL DRIVE					
R641	1-249-455-11	CARBON	4.7K 5% 1/4W F	T503	△ 1-424-545-22	TRANSFORMER, FERRITE (PMT)					
R642	1-249-451-11	CARBON	2.2K 5% 1/4W F	T601	△ 1-423-593-11	TRANSFORMER, LINE FILTER (LFT)					
R643	1-216-379-11	METAL OXIDE	6.8 5% 2W F	T602	△ 1-424-220-21	TRANSFORMER, LINE FILTER					
R644	△ 1-212-853-61	FUSIBLE	6.8 5% 1/4W F	T603	△ 1-423-563-11	TRANSFORMER, CONVERTER DRIVE					
R645	1-249-377-11	CARBON	0.47 5% 1/4W F	T604	△ 1-423-615-11	TRANSFORMER, CONVERTER (PIT)					
R646	1-249-429-11	CARBON	10K 5% 1/4W	T605	△ 1-423-582-21	TRANSFORMER, FERRITE (SBT)					
R647	1-249-433-11	CARBON	22K 5% 1/4W	(KV-27V10/29V10C/29V10M)							
R648	1-249-414-11	CARBON	560 5% 1/4W	△ 1-426-669-11	TRANSFORMER, CONVERTER (SBT)						
R649	1-216-431-11	METAL OXIDE	560 5% 1W F	(KV-27V15/32V15)							
R650	1-249-405-11	CARBON	100 5% 1/4W F	<THERMISTOR>							
R653	1-249-381-11	CARBON	1 5% 1/4W	THP601	△ 1-809-827-21	THERMISTOR, POSITIVE (KV-29V10C)					
R654	1-216-385-11	METAL OXIDE	0.47 5% 3W F	△ 1-809-539-21	THERMISTOR, POSITIVE (KV-27V10/29V10M/32V15)						
R655	1-249-417-11	CARBON	1K 5% 1/4W F	<VARISTOR>							
R656	1-249-381-11	CARBON	1 5% 1/4W	VDR601	1-807-288-11	VARISTOR					
R657	1-249-417-11	CARBON	1K 5% 1/4W	VDR602	1-810-053-11	VARISTOR					
R658	1-249-389-11	CARBON	4.7 5% 1/4W F	VDR603	1-810-053-11	VARISTOR					
R659	1-247-883-00	CARBON	150K 5% 1/4W	*****							
R660	1-249-433-11	CARBON	22K 5% 1/4W								
R661	1-249-406-11	CARBON	120 5% 1/4W								
R663	1-247-737-11	CARBON	68 5% 1/2W F								
R683	1-205-998-11	WIREWOUND	1 5% 1/4W F								
R684	1-205-998-11	WIREWOUND	1 5% 1/4W F								
R687	1-216-359-00	METAL OXIDE	6.8 5% 1W F								
R688	1-215-861-00	METAL OXIDE	47 5% 1W								
R690	1-249-423-11	CARBON	3.3K 5% 1/4W								

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **▲** are critical for safety.
Replace only with part number specified.

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

KV-27V10/27V15
RM-Y117 RM-Y121/RM-CM101
KV-29V10C/29V10M/32V15
RM-Y117 RM-Y117 RM-Y121
RM-CM101

H **L** **Z** (KV-27V15/32V15)

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
	*1-646-717-11	H BOARD *****			S1007 Δ 1-692-431-21	SWITCH, TACTILE		
		<CAPACITOR>			*****	*****		
C1001	1-124-248-00	ELECT	22MF	20%	25V			
C1002	1-126-160-11	ELECT	1MF	20%	50V			
C1003	1-126-160-11	ELECT	1MF	20%	50V			
C1004	1-124-584-00	ELECT	100MF	20%	10V			
C1005	1-164-005-11	CERAMIC CHIP	0.47MF	25V				
		<CONNECTOR>			*****	*****		
CN154	*1-564-520-11	PLUG, CONNECTOR 5P			*1-651-245-11	L BOARD *****		
CN155	1-564-524-11	PLUG, CONNECTOR 9P				<CAPACITOR>		
CN156	*1-564-518-11	PLUG, CONNECTOR 3P			C1902	1-164-004-11 CERAMIC CHIP 0.1MF	10% 25V	
		<CONNECTOR>				<CONNECTOR>		
		<DIODE>			CN1903*1-564-518-11	PLUG, CONNECTOR 3P		
D1004	1-810-039-31	LED UNIT				<IC>		
		<IC>			IC1903	8-759-189-86 IC IS455J		
IC1001	8-741-100-62	IC SBX1618-51				<RESISTOR>		
		<JACK>			R1901	1-216-133-00 METAL GLAZE	3.3M 5% 1/10W	
J1001	1-695-585-11	JACK BLOCK, PIN (L TYPE) 3P			R1902	1-216-025-00 METAL GLAZE	100 5% 1/10W	
		<TRANSISTOR>			*****	*****		
Q1001	8-729-216-22	TRANSISTOR 2SA1162-G			A-1390-411-A	Z BOARD, COMPLETE (KV-27V15/32V15)		
Q1002	8-729-422-27	TRANSISTOR 2SD601A-Q			*****	*****		
Q1003	8-729-422-27	TRANSISTOR 2SD601A-Q				<CAPACITOR>		
		<RESISTOR>			C901	1-124-903-11 ELECT	1MF 20% 50V	
R1001	1-247-804-11	CARBON	75	5%	1/4W	C902	1-124-903-11 ELECT	1MF 20% 50V
R1002	1-249-425-11	CARBON	4.7K	5%	1/4W	C933	1-126-964-11 ELECT	10MF 20% 50V
R1003	1-216-113-00	METAL GLAZE	470K	5%	1/10W	C934	1-126-964-11 ELECT	10MF 20% 50V
R1004	1-249-425-11	CARBON	4.7K	5%	1/4W			
R1005	1-216-113-00	METAL GLAZE	470K	5%	1/10W			
R1007	1-216-073-00	METAL GLAZE	10K	5%	1/10W			
R1008	1-216-025-00	METAL GLAZE	100	5%	1/10W			
R1009	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W			
R1010	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W			
R1011	1-216-025-00	METAL GLAZE	100	5%	1/10W			
R1012	1-216-049-00	METAL GLAZE	1K	5%	1/10W			
R1014	1-216-047-00	METAL GLAZE	820	5%	1/10W			
R1015	1-216-033-00	METAL GLAZE	220	5%	1/10W			
R1016	1-216-033-00	METAL GLAZE	220	5%	1/10W			
R1017	1-216-105-00	METAL GLAZE	220K	5%	1/10W			
R1018	1-216-089-91	METAL GLAZE	47K	5%	1/10W			
R1019	1-216-025-00	METAL GLAZE	100	5%	1/10W			
R1021	1-216-045-00	METAL GLAZE	680	5%	1/10W			
		<SWITCH>				<CONNECTOR>		
S1001	1-692-431-21	SWITCH, TACTILE			D901	8-719-121-24 DIODE RD9.1ESL		
S1002	1-692-431-21	SWITCH, TACTILE			D902	8-719-404-46 DIODE MA110		
S1003	1-692-431-21	SWITCH, TACTILE			D903	8-719-404-46 DIODE MA110		
S1004	1-692-431-21	SWITCH, TACTILE			D904	8-719-109-93 DIODE RD6.2ESB2		
S1005	1-692-431-21	SWITCH, TACTILE			D905	8-719-109-66 DIODE RD3.3ESB2		
		<DIODE>						
		<JACK>			D906	8-719-121-24 DIODE RD9.1ESL		
		<TRANSISTOR>			D907	8-719-404-46 DIODE MA110		
J901	1-764-873-11	JACK			D908	8-719-404-46 DIODE MA110		
J902	1-764-874-11	JACK			D909	8-719-404-46 DIODE MA110		
		<CAPACITOR>			D910	8-719-404-46 DIODE MA110		
		<CONNECTOR>						
		<DIODE>			D911	8-719-404-46 DIODE MA110		
		<JACK>			D912	8-719-404-46 DIODE MA110		
		<TRANSISTOR>			D920	8-719-404-46 DIODE MA110		
		<RESISTOR>						
Q901	8-729-422-27	TRANSISTOR 2SD601A-Q						

Z (KV-27V15/32V15)

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q902	8-729-216-22	TRANSISTOR 2SA1162-G		C408	1-124-916-11	ELECT 22MF	20% 25V
Q903	8-729-216-22	TRANSISTOR 2SA1162-G		C409	1-124-903-11	ELECT 1MF	20% 50V
Q904	8-729-422-27	TRANSISTOR 2SD601A-Q		C410	1-124-903-11	ELECT 1MF	20% 50V
Q905	8-729-422-27	TRANSISTOR 2SD601A-Q		C411	1-104-665-11	ELECT 100MF	20% 50V
Q906	8-729-422-27	TRANSISTOR 2SD601A-Q					(KV-27V10/29V10C/29V10M)
Q907	8-729-216-22	TRANSISTOR 2SA1162-G		C412	1-124-916-11	ELECT 22MF	20% 25V
Q908	8-729-216-22	TRANSISTOR 2SA1162-G		C413	1-126-964-11	ELECT 10MF	20% 50V
Q909	8-729-216-22	TRANSISTOR 2SA1162-G		C414	1-124-499-11	ELECT 1MF	20% 50V
Q910	8-729-422-27	TRANSISTOR 2SD601A-Q		C415	1-124-499-11	ELECT 1MF	20% 50V
Q911	8-729-140-93	TRANSISTOR 2SB733-34		C416	1-126-964-11	ELECT 10MF	20% 50V
Q912	8-729-216-22	TRANSISTOR 2SA1162-G		C417	1-124-902-00	ELECT 0.47MF	20% 50V
				C418	1-124-902-00	ELECT 0.47MF	20% 50V
				C419	1-124-126-00	ELECT 47MF	20% 16V
				C420	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C421	1-124-902-00	ELECT 0.47MF	20% 50V
							(KV-27V10/29V10C/29V10M)
JR901	1-216-295-00	METAL GLAZE 0 5%	1/10W				
JR902	1-216-295-00	METAL GLAZE 0 5%	1/10W				
JR903	1-216-295-00	METAL GLAZE 0 5%	1/10W				
JR907	1-216-295-00	METAL GLAZE 0 5%	1/10W				
R901	1-249-405-11	CARBON 100 5%	1/4W F				
R902	1-216-033-00	METAL GLAZE 220 5%	1/10W				
R903	1-216-073-00	METAL GLAZE 10K 5%	1/10W				
R904	1-216-105-00	METAL GLAZE 220K 5%	1/10W				
R905	1-216-105-00	METAL GLAZE 220K 5%	1/10W				
R906	1-216-089-91	METAL GLAZE 47K 5%	1/10W				
R907	1-216-089-91	METAL GLAZE 47K 5%	1/10W				
R908	1-216-005-00	METAL GLAZE 15 5%	1/10W				
R909	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W				
R910	1-216-097-00	METAL GLAZE 100K 5%	1/10W				
R911	1-216-105-00	METAL GLAZE 220K 5%	1/10W				
R912	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W				
R913	1-216-101-00	METAL GLAZE 150K 5%	1/10W				
R914	1-216-089-91	METAL GLAZE 47K 5%	1/10W				
R915	1-216-089-91	METAL GLAZE 47K 5%	1/10W				
R916	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W				
R917	1-216-097-00	METAL GLAZE 100K 5%	1/10W				
R918	1-216-105-00	METAL GLAZE 220K 5%	1/10W				
R919	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W				
R921	1-216-089-91	METAL GLAZE 47K 5%	1/10W				
R922	1-216-073-00	METAL GLAZE 10K 5%	1/10W				
R923	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W				
R924	1-216-073-00	METAL GLAZE 10K 5%	1/10W				
R925	1-216-041-00	METAL GLAZE 470 5%	1/10W				
R926	1-216-025-00	METAL GLAZE 100 5%	1/10W				
R927	1-216-097-00	METAL GLAZE 100K 5%	1/10W				
R928	1-216-097-00	METAL GLAZE 100K 5%	1/10W				
R929	1-249-405-11	CARBON 100 5%	1/4W F				
R935	1-216-073-00	METAL GLAZE 10K 5%	1/10W				
R936	1-216-089-91	METAL GLAZE 47K 5%	1/10W				
<hr/>							
<RESISTOR>							
CM401	1-467-554-11	FILTER BLOCK, COMB					
<hr/>							
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CN141	*1-564-520-11	PLUG, CONNECTOR 5P					
CN142	1-564-517-11	PLUG, CONNECTOR 2P					
CN143	1-750-395-11	SOCKET, CONNECTOR 32P					
CN144	*1-564-521-11	PLUG, CONNECTOR 6P					
CN146	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P					
<hr/>							
CN147	1-750-395-11	SOCKET, CONNECTOR 32P					
CN148	1-564-517-11	PLUG, CONNECTOR 2P					
CN149	*1-564-519-11	PLUG, CONNECTOR 4P					
<hr/>							
<CONNECTOR>							
<hr/>							
<DIODE>							
D401	8-719-110-17	DIODE RD10ESB2					
D402	8-719-110-17	DIODE RD10ESB2					
D403	8-719-110-17	DIODE RD10ESB2					
D404	8-719-110-17	DIODE RD10ESB2					
D405	8-719-110-17	DIODE RD10ESB2					
D408	8-719-110-17	DIODE RD10ESB2					
D409	8-719-110-17	DIODE RD10ESB2					
D410	8-719-110-17	DIODE RD10ESB2					
D411	8-719-110-17	DIODE RD10ESB2					
D429	8-719-110-17	DIODE RD10ESB2					
D430	8-719-110-17	DIODE RD10ESB2					
D431	8-719-110-17	DIODE RD10ESB2					
<hr/>							
<CAPACITOR>							
C401	1-163-031-11	CERAMIC CHIP 0.01MF	50V				
C402	1-124-916-11	ELECT 22MF	20% 25V				
C405	1-124-916-11	ELECT 22MF	20% 25V				
C406	1-124-903-11	ELECT 1MF	20% 50V				
C407	1-124-903-11	ELECT 1MF	20% 50V				

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D436	8-719-110-17	DIODE RD10ESB2 (KV-27V15/32V15)		R401	1-247-804-11	CARBON	75 5% 1/4W
D437	8-719-110-17	DIODE RD10ESB2 (KV-27V15/32V15)		R402	1-216-113-00	METAL GLAZE	470K 5% 1/10W
		<IC>		R403	1-216-113-00	METAL GLAZE	470K 5% 1/10W
IC401	8-759-637-10	IC M52470AP (KV-27V10/29V10C/29V10M)		R404	1-247-804-11	CARBON	75 5% 1/4W
IC402	8-752-067-28	IC CXA1545AS (KV-27V15/32V15)		R405	1-216-113-00	METAL GLAZE	470K 5% 1/10W
IC403	8-759-088-00	IC MM1114XFF (KV-27V10/29V10C/29V10M)		R406	1-216-113-00	METAL GLAZE	470K 5% 1/10W
IC404	8-759-164-18	IC MM1118XFF (KV-27V10/20V10C/29V10M)		R407	1-247-804-11	CARBON	75 5% 1/4W
		<JACK>		R408	1-216-113-00	METAL GLAZE	470K 5% 1/10W
J401	1-750-515-11	TERMINAL BLOCK, S 3P		R409	1-216-113-00	METAL GLAZE	470K 5% 1/10W
J402	1-750-517-11	JACK BLOCK, PIN 3P		R410	1-249-425-11	CARBON	4.7K 5% 1/4W
J404	1-750-516-11	JACK BLOCK, PIN 2P		R411	1-249-425-11	CARBON	4.7K 5% 1/4W
		<COIL>		R412	1-249-425-11	CARBON	4.7K 5% 1/4W
L401	1-410-473-11	INDUCTOR	18UH (KV-27V15/32V15)	R413	1-249-425-11	CARBON	4.7K 5% 1/4W
L403	1-410-476-11	INDUCTOR	33UH (KV-27V15/32V15)	R414	1-247-804-11	CARBON	75 5% 1/4W
L404	1-410-669-31	INDUCTOR	33UH (KV-27V15/32V15)	R415	1-249-425-11	CARBON	4.7K 5% 1/4W
		<TRANSISTOR>		R416	1-216-647-11	METAL CHIP	680 0.50% 1/10W
Q401	8-729-422-27	TRANSISTOR 2SD601A-Q		R417	1-216-645-11	METAL CHIP	560 0.50% 1/10W
Q405	8-729-216-22	TRANSISTOR 2SA1162-G		R418	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-27V10/29V10C/29V10M)
Q406	8-729-216-22	TRANSISTOR 2SA1162-G		R421	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
Q410	8-729-422-27	TRANSISTOR 2SD601A-Q (KV-32V15)		R425	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
Q415	8-729-422-27	TRANSISTOR 2SD601A-Q (KV-32V15)		R431	1-216-045-00	METAL GLAZE	680 5% 1/10W (KV-27V10/29V10C/29V10M)
Q416	8-729-216-22	TRANSISTOR 2SA1162-G (KV-32V15)			1-216-049-00	METAL GLAZE	1K 5% 1/10W (KV-27V15/32V15)
Q417	8-729-216-22	TRANSISTOR 2SA1162-G (KV-32V15)		R432	1-216-045-00	METAL GLAZE	680 5% 1/10W (KV-27V10/29V10C/29V10M)
Q418	8-729-216-22	TRANSISTOR 2SA1162-G (KV-32V15)			1-216-295-00	METAL GLAZE	0 5% 1/10W (KV-27V15/32V15)
		<RESISTOR>		R434	1-216-045-00	METAL GLAZE	680 5% 1/10W (KV-27V10/29V10C/29V10M)
JR402	1-216-295-00	METAL GLAZE	0 5% 1/10W		1-216-049-00	METAL GLAZE	1K 5% 1/10W (KV-27V15/32V15)
JR408	1-216-295-00	METAL GLAZE	0 5% 1/10W	R435	1-216-045-00	METAL GLAZE	680 5% 1/10W (KV-27V10/29V10C/29V10M)
JR409	1-216-295-00	METAL GLAZE	0 5% 1/10W		1-216-295-00	METAL GLAZE	0 5% 1/10W (KV-27V15/32V15)
		(KV-27V10/29V10C/29V10M)		R439	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR410	1-216-295-00	METAL GLAZE	0 5% 1/10W	R440	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-27V10/29V10C/29V10M)
JR411	1-216-295-00	METAL GLAZE	0 5% 1/10W	R441	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR412	1-216-295-00	METAL GLAZE	0 5% 1/10W	R442	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-27V10/29V10C/29V10M)
JR415	1-216-295-00	METAL GLAZE	0 5% 1/10W	R443	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-27V10/29V10C/29V10M)
JR416	1-216-295-00	METAL GLAZE	0 5% 1/10W	R444	1-216-095-00	METAL GLAZE	82K 5% 1/10W
JR418	1-216-295-00	METAL GLAZE	0 5% 1/10W	R445	1-216-073-00	METAL GLAZE	10K 5% 1/10W (KV-27V15/32V15)
JR419	1-216-295-00	METAL GLAZE	0 5% 1/10W	R446	1-216-073-00	METAL GLAZE	10K 5% 1/10W (KV-27V15/32V15)
JR422	1-216-295-00	METAL GLAZE	0 5% 1/10W	R450	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-27V10/29V10C/29V10M)
JR423	1-216-295-00	METAL GLAZE	0 5% 1/10W		1-216-643-11	METAL CHIP	470 0.50% 1/10W (KV-27V15/32V15)
		(KV-27V10/29V10C/29V10M)		R451	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W (KV-27V15/32V15)
JR424	1-216-295-00	METAL GLAZE	0 5% 1/10W	R452	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-32V15)
		(KV-27V10/29V10C/29V10M)		R453	1-216-645-11	METAL CHIP	560 0.50% 1/10W (KV-32V15)
JR428	1-216-295-00	METAL GLAZE	0 5% 1/10W		1-216-653-11	METAL CHIP	1.2K 0.50% 1/10W (KV-27V10/29V10C/29V10M)
JR429	1-216-295-00	METAL GLAZE	0 5% 1/10W	R454	1-216-025-00	METAL GLAZE	100 5% 1/10W (KV-27V10/29V10C/29V10M)
JR430	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR431	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR434	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR435	1-216-295-00	METAL GLAZE	0 5% 1/10W				
		(KV-27V10/29V10C/29V10M)					
JR498	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR499	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR901	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JW454	1-249-429-11	CARBON	10K 5% 1/4W (KV-27V10/29V10C/29V10M)				
JW456	1-249-429-11	CARBON	10K 5% 1/4W (KV-27V10/29V10C/29V10M)	R454	1-216-025-00	METAL GLAZE	1.2K 0.50% 1/10W (KV-27V10/29V10C/29V10M)

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **▲** are critical for safety. Replace only with part number specified.

UA

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	1-216-295-00	METAL GLAZE	0 5% 1/10W (KV-27V15/32V15)	V901	▲ 8-733-723-05 ▲ 8-733-848-05	PICTURE TUBE (A80JYV50X) (KV-32V15) PICTURE TUBE (A68KZJ50X) (KV-27V10/27V15/29V10C/29V10M)	*****
R456	1-216-041-00	METAL GLAZE	470 5% 1/10W (KV-27V15/32V15)				
R457	1-216-033-00	METAL GLAZE	220 5% 1/10W (KV-27V15/32V15)				ACCESSORIES AND PACKING MATERIALS
R458	1-216-033-00	METAL GLAZE	220 5% 1/10W (KV-27V15/32V15)				*****
R459	1-216-081-00	METAL GLAZE	22K 5% 1/10W (KV-32V15)	1-467-626-11	MOUSE, INTERIJENT CABLE (RM-CM101)	(KV-27V15/32V15)	
R460	1-216-037-00	METAL GLAZE	330 5% 1/10W (KV-32V15)	1-569-007-11	ADAPTER, CONVERSION 2P (KV-29V10C)		
R461	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W (KV-32V15)	3-758-286-21	MANUAL, INSTRUCTION (ENGLISH) (KV-27V10/29V10M)		
R462	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W (KV-32V15)	3-758-286-31	MANUAL, INSTRUCTION (FRENCH) (KV-27V10(CND))		
R463	1-216-045-00	METAL GLAZE	680 5% 1/10W (KV-32V15)	3-758-286-41	MANUAL, INSTRUCTION (SPANISH) (KV-29V10M)		
R464	1-216-045-00	METAL GLAZE	680 5% 1/10W (KV-32V15)	3-758-287-21	MANUAL, INSTRUCTION, CABLE MOUSE (KV-27V15/32V15)		
R476	1-216-081-00	METAL GLAZE	22K 5% 1/10W (KV-32V15)	3-758-287-31	MANUAL, INSTRUCTION, CABLE MOUSE (KV-27V15(CND)/32V15(CND))		
R478	1-216-041-00	METAL GLAZE	470 5% 1/10W (KV-27V15/32V15)	3-758-287-41	MANUAL, INSTRUCTION, CABLE MOUSE (KV-27V15(US)/32V15(US))		
R479	1-216-081-00	METAL GLAZE	22K 5% 1/10W (KV-32V15)	3-758-289-21	MANUAL, INSTRUCTION (ENGLISH) (KV-27V15/32V15)		
R480	1-216-081-00	METAL GLAZE	22K 5% 1/10W (KV-32V15)	3-758-289-31	MANUAL, INSTRUCTION (FRENCH) (KV-27V15(CND)/32V15(CND))		
R481	1-216-081-00	METAL GLAZE	22K 5% 1/10W (KV-32V15)	3-758-289-41	MANUAL, INSTRUCTION (SPANISH) (KV-27V15(US)/32V15(US))		
R482	1-249-417-11	CARBON	1K 5% 1/4W	3-758-336-41	MANUAL, INSTRUCTION (KV-29V10C)		
R483	1-249-417-11	CARBON	1K 5% 1/4W	4-043-736-01	FILTER, MOUSE (KV-27V15/32V15)		
R488	1-216-081-00	METAL GLAZE	22K 5% 1/10W (KV-32V15)	4-043-737-01	HOLDER, FILTER (KV-27V15/32V15)		
R489	1-216-081-00	METAL GLAZE	22K 5% 1/10W (KV-32V15)	*4-041-255-01	BAG, PROTECTION (KV-27V10/27V15/29V10C/29V10M)		
R490	1-216-295-00	METAL GLAZE	0 5% 1/10W	*4-041-259-01	BAG, PROTECTION (KV-32V15)		
R491	1-216-295-00	METAL GLAZE	0 5% 1/10W	*4-043-483-01	INDIVIDUAL CARTON (KV-27V10/27V15/29V10C/29V10M)		
R492	1-216-295-00	METAL GLAZE	0 5% 1/10W	*4-043-484-01	CUSHION (UPPER) (ASSY) (KV-27V10/27V15/29V10C/29V10M)		
R1438	1-216-081-00	METAL GLAZE	22K 5% 1/10W (KV-27V15/32V15)	*4-043-485-01	CUSHION (LOWER) (ASSY) (KV-27V10/27V15/29V10C/29V10M)		

MISCELLANEOUS							

▲ 1-402-952-12 COIL, DEMAGNETIZATION (KV-32V15)							
▲ 1-406-726-22 COIL, DEMAGNETIZATION (KV-27V10/27V15/29V10M)							
▲ 1-406-726-41 COIL, DEMAGNETIZATION (KV-29V10C)							
1-417-178-11 SELECTOR, ANTENNA (AS-2) (KV-32V15)							
1-504-524-11 SPEAKER (8CM)							
1-569-007-11 ADAPTER, CONVERSION 2P (KV-29V10C)							
1-573-657-11 PLAUG, F-PIN (KV-27V10/27V15/29V10C/29V10M)							
▲ 1-751-056-11 CORD, POWER (WITH CONNECTOR) 6A/250V (KV-29V10C)							
▲ 1-751-059-11 CORD, POWER (WITH CONNECTOR) 10A/125V (KV-27V10/27V15/29V10M/32V15)							
*1-751-135-11 CABLE, PIN (KV-32V15)							
*1-751-136-11 CABLE, PIN (KV-32V15)							
▲ 8-451-275-42 DEFLECTION YOKE Y28PFA(VTM) (KV-27V10/27V15/29V10C/29V10M)							
▲ 8-451-315-41 DEFLECTION YOKE Y34FXA(VTM) (KV-32V15)							
REMOTE COMMANDER							
1-467-060-13 REMOTE COMMANDER (RM-Y117) (KV-27V10/29V10C/29V10M)							
9-903-826-01 COVER, BATTERY (FOR RM-Y117) (KV-27V10/29V10C/29V10M)							
1-467-621-11 REMOTE COMMANDER (RM-Y121) (KV-27V15/32V15)							
9-907-089-01 COVER, BATTERY (FOR RM-Y121) (KV-27V15/32V15)							